**A Study of Gloucester's Commercial Fishing Infrastructure:**
**INTERIM REPORT**

by

Gloucester Community Panel (Sarah Robinson, Coordinator)
Community Panels Project

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** Full report available at www.fishermenspartnership.org (click on 'Community Panels, A Pilot Project'), or at web.mit.edu/seagrant/aqua/cmss(click on 'Community Panels')*

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## Summary

This is an interim report on a cooperative research study of the shoreside infrastructure supporting commercial fishing in Gloucester in 2003.
Gloucester is and has been for a very long time a northeast regional center for the United States fishing industry. Gloucester's fleet is changing, but, as before, the majority of its vessels fish for groundfish. However, some groundfish vessels fish for non-groundfish species as well, and there are also vessels in Gloucester that fish exclusively for non-groundfish species. Gloucester's shoreside support businesses serve Gloucester-based vessels but they also serve vessels from outside Gloucester. Because Gloucester is a regional hub, boats from outside Gloucester come to Gloucester for haul-outs, for machine parts, for gear, to land catch, and so on. They buy these services in Gloucester because they cannot get comparable services where they tie up; because they come to Gloucester to land fish and then pick up services while they are in the city; and/or because they temporarily relocate to Gloucester to be near the fishing grounds off Gloucester.

Gloucester's shoreside infrastructure, and hence its very status as a hub port, is precarious today. This is due, it appears, to the cumulative effects of diminished landings and extensive regulation of fishing throughout the 1990s. Moreover, Gloucester was significantly changed – diminished – by the 1997 federal buyback program which removed a significant proportion of Gloucester's large groundfish vessels, along with their seasoned captains and experienced crews.

At present, the shoreside infrastructure in Gloucester supporting commercial fishing consists of six or seven processors of any size (three for groundfish and other species, and three to four for specialty species); a seafood display auction that sells mainly groundfish; multiple buyers of fish (groundfish, tuna, lobsters, and others); multiple wharves for offloading; one ice company; two repair and haul-out facilities; several fuel services (though only one with a fuel barge); a handful of gear shops (one that sells bottom-trawl gear, one that hangs gill-nets, three that sell lobster and gillnet gear, one that sells mid-water trawl gear); and public and private berthing facilities. These shoreside businesses are tending to one of two directions: Some are sustaining serious financial losses and will likely cease operations, while some are staying solvent by diversifying away from serving the fishing industry. Fish processing businesses that, by their nature, cannot diversify away from the fish business, have either gone out of business or are diversifying away from Gloucester-landed (or even New England-landed)

groundfish. The few waterfront businesses who do not face the choice of diversifying away from the fishing industry or from groundfish are the buyers and processors of some non-groundfish species. Many of the species these businesses deal in, however, cannot support expansion (hagfish, lobsters) and may be short-lived as were dogfish and sea urchins.

This stripped down infrastructure is highly vulnerable to further cuts in fishing activity. As some businesses fail and others turn away from supporting commercial fishing, two things are likely to happen. First, if one or more of the critical elements comprising the fishing industry infrastructure disappears, the others will likely fall like 'dominoes.' If boats are unable to get a full suite of services in Gloucester, they will move to other ports where the full suite of services is available. Gloucester boats that are mobile will leave, and boats from outside Gloucester will cease coming to Gloucester. Second, as the Gloucester waterfront loses the set of services supporting the commercial fishing industry, the pressure to remove the marine industrial zoning restrictions in the waterfront area will mount, and, at some point, presumably succeed. When and if the waterfront is re-zoned (a matter of both city regulation and state law) and non-industrial, non-water dependent uses of the properties are installed, it will be, practically speaking, impossible to re-zone the area for marine industrial uses.[1]

The Gloucester fishermen and shoreside business owners who shared their expertises in this cooperative research project are appalled at the idea that pending measures to rebuild the groundfish fishery could have the effect of bringing down the centuries old commercial fishing infrastructure in the proud port of Gloucester. They fear that when groundfish landings are rebuilt and landings are increased 2.5 – 3x their current rates, there will be no Gloucester infrastructure, and hence no Gloucester industry, to participate in the fishery. This loss will be an economic loss, a loss of identity, a loss of skills, and a loss of a 'way of life' that has inspired and sustained people both inside and outside the industry. These losses will bring in their wake large social restructurings difficult to foresee.

[1] One state law, Massachusetts General Laws, Chapter 91, requires that filled-in tidelands be used for water dependent uses or for a proper public purpose, and this law, which applies throughout the state, is unlikely to change. However, Chapter 91 applies to only the shorefront portions of the waterfront, and, unlike the requirements more vulnerable to change, does not require marine industrial use of such properties.

## I. Introduction

### *A. Background*

This is an interim report on Gloucester's shoreside infrastructure produced as part of an ongoing cooperative social science research project. The research project is entitled 'Institutionalizing Social Science Data Collection' and is funded by the Northeast Consortium and the Saltonstall-Kennedy federal grant program. The three principal investigators are David Bergeron, Executive Director, Massachusetts Fishermen's Partnership; Dr. Madeleine Hall-Arber, anthropologist at MIT Sea Grant; and Dr. Bonnie McCay, anthropologist at Rutgers University. Prof. David Terkla, economist at U Mass Boston, is a consultant to the project. The purpose of the project is to set up community panels in six fishing ports along the New England coast, and for the community panels to identify and develop critically needed social and economic information about their ports. The six ports in the study are Point Judith, Scituate, New Bedford, Gloucester, Portland, and Jonesport/ Beals Island. This project is one of only a few social science cooperative research projects regarding the fisheries, and it is predicated on the idea that members of the fishing industry (including the allied support industries) are experts in their fields and that their expertise is essential to developing accurate and useful information about the social and economic side of the fisheries.

In Gloucester, the panel is composed of fishermen (owners and operators of small, medium, and large draggers, small and medium gillnet boats, and one small long-lining vessel), owners and operators of shoreside businesses (the seafood display auction, fish processing facilities, the ice company, gear shops, the marine railways), a settlement agent, a maritime attorney, representatives of fishing industry organizations (the Gloucester Fishermen's Wives Association and the Northeast Seafood Coalition), Gloucester's Harbor Plan Implementation Coordinator, and others. Some members represent both the shoreside and the harvesting sector: One fisherman is also a wharf owner, and one gear shop owner is also a lobsterman. The coordinator of the panel is Sarah Robinson, PhD candidate in anthropology at Harvard University. Thirty-four people contributed to this study, either as panel members or through interviews with the panel coordinator. A complete list of panel members and interviewees is appended to this report as Appendix A.

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### *B. Purpose*

The Gloucester panel decided to focus on the status of the commercial fishing infrastructure in the port of Gloucester. Gloucester today is predominantly a groundfish port, and it is a hub for groundfish vessels in the region. (In 2001, 71.4% of the revenues of multi-species vessels homeported in Gloucester were from groundfish; this figure averaged 63% in the period 1994 to 2001.[2]) Panel members wanted to

[2] See Amendment 13 DSEIS, Volume II, p. 1410, Table 542: Fishing Activity for Vessels Homeported in Gloucester (August 21, 2003). This table may overstate the percentage of total Gloucester fishing revenues from groundfish because the table examines only those vessels homeported in Gloucester

determine the effects of increasingly severe federal restrictions on groundfishing (beginning with the emergency closure of Georges Bank in 1993 and continuing through Amendments 5 and 7, various frameworks, and the Interim Rule) and related programs (the buyback program) on the shoreside infrastructure in Gloucester.

Moreover, the pendency of Amendment 13 makes a study of shoreside infrastructure both timely and essential. There is widespread concern that the shoreside infrastructure in Gloucester will not survive the additional cuts in groundfishing that will be mandated by Amendment 13. Moreover, there is concern that a loss of infrastructure will mean the loss of the fishing industry in Gloucester. This is because the industry cannot exist without supporting shoreside infrastructure. Finally, there is concern that this loss of infrastructure and industry, when and if it comes, will be permanent. When and if the offloading facilities, the ice house, the fishing vessel berths, and so on disappear from the waterfront, their place will be taken by other uses (residential, recreational, non-water dependent commercial, etc.), and these other uses will not be easily dislodged in the future. This concern about the practical irreversibility of the loss of commercial fishing infrastructure on waterfronts is supported by basic principles of economics and by case studies of such change.[3]

This scenario is especially disturbing for community panel members because the goal of Amendment 13 is to rebuild groundfish stocks to levels that will permit a two and one-half to three fold increase in permissible landings.[4] The fishery will be rebuilt, and is already rebuilding.[5] The grave and abiding concern is that, in the future, when federal regulations permit the harvesting of these rebuilt stocks, Gloucester will not be able to participate in the fishery because it will have lost its infrastructure and its industry during the rebuilding period, and it will not be able to get them back.

The study of shoreside infrastructure, therefore, was an obvious priority for the Gloucester community panel. The urgency of undertaking the study was underscored by the fact that the New England Fishery Management Council's study of the likely social and economic impacts of Amendment 13 does not include an assessment of the impacts of Amendment 13 on shoreside infrastructure in the New England fishing ports.

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that have federal multispecies permits. However, the percentage of federally permitted vessels homeported in Gloucester with multispecies permits is very high. Of all federally permitted fishing vessels claiming Gloucester as a primary port, 87 per cent have multispecies permits. See NMFS online permit database (query run in March 2003).

[3] See Marine Law Institute, University of Maine, in association with Center for Applied Social Science, Boston University, *Guidebook to the Economics of Waterfront Planning and Water Dependent Uses*, p. 24-26 (1988).

[4] See DSEIS, Section 4.4, Economic Impacts, p. I-516 et seq. (August 21, 2003).

[5] See DSEIS, Executive Summary, I-v (August 21, 2003).

*C. Method*

In order to undertake the study of commercial fishing infrastructure in the port of Gloucester, members of the panel met as a focus group three times. In addition, some panel members gathered information outside of meetings and the panel coordinator conducted a number of interviews. In the first of the three focus group meetings, the group brainstormed in an effort to (1) determine the elements of shoreside infrastructure essential to the support of commercial fishing; (2) assess the status of each of these critical elements in Gloucester today; (3) identify the characteristics of the shoreside support industries in Gloucester today; and (4) characterize the harbor today as a whole. The coordinator prepared a transcript of this extensive (4 hour) brainstorming session and, on the basis of that transcript, prepared a draft report. The second time the group met to review the draft report and to identify further data needs. Following that second meeting, the panel coordinator conducted a series of interviews of local shoreside experts and added to and revised the draft report. The group met one last time to review the information in the report and to recommend further changes and additions. See Appendix A for a list of the 34 people who participated in the project as panel members or interviewees.

It should be noted that, in addition to characterizing the current difficulties on the waterfront, panel members are also working among themselves and with city officials – the Gloucester Harbor Plan Implementation Coordinator (who has been attending all the sessions as a panel member), the Director of Community Development, and others – to suggest ways in which some of Gloucester's shoreside infrastructure difficulties might be addressed. There is a creative energy within the group and a very strong desire to develop means to maintain Gloucester as a key port for the fishing industry.

*D. Outline*

This interim report is divided into six sections. The first is this introduction; the second is a list of shoreside infrastructure needs essential to a functioning fishing port; the third is a discussion of selected elements of Gloucester's shoreside infrastructure; the fourth is a discussion of some characteristics of Gloucester's shoreside support businesses; the fifth is an assessment of the Gloucester's infrastructure as a whole; and the sixth sketches the panel's vision for the port. Appendix A to the report is a list of all panel members and interviewees. Appendix B is a list of the businesses, structures, and space that together comprise Gloucester's shoreside infrastructure. Appendix C is a compilation of the graphs referred to throughout the text.

## II. Infrastructure Needs for a Commercial Fishing Port

The panel identified three different categories of commercial fishing infrastructure critical to a commercial fishing port: businesses, structures, and space; people (labor); and various 'intangibles.' The list below is still a work in progress and thus should not be read as complete; however, the panel does believe that the following items are critical to a functioning commercial fishing port.

### (A) Businesses, Structures, and Space:

1. Mooring space for fishing vessels
2. Facilities to maintain and repair fishing vessels
3. Gear and supply shops
4. Open space for working on gear
5. Fueling facilities
6. Ice plant(s)
7. Fish buyers/ Auction for fish buyers
8. Fish processors
9. Transportation for fish and fish products
10. Coast Guard/ port security

### (B) People

1. Experienced fishermen, including captains
2. Young fishermen, including young captains
3. Gear technicians: people who understand gear, and can fix and design gear (usually such people are also fishermen)
4. Lumpers
5. Settlement agents
6. Maritime attorneys
7. Skilled trades
    - Welders
    - Electricians
    - Woodworkers
    - Diesel engine mechanics
    - Commercial divers/ underwater welders
    - Electronics specialists
    - Refrigeration specialists

### (C ) Intangibles

1. Markets for fish
2. Financing for shoreside operations
3. Fishing industry organizations
4. A voice for the city in the fishery management process

5. A vision for the harbor
6. Positive public relations for the fishing industry
7. Clear lines of communication between the city/industry and government decision-makers

## III. Discussion of Selected Elements of Gloucester's Shoreside Infrastructure

This section contains a discussion of selected elements of Gloucester's shoreside infrastructure today. This discussion should be read in conjunction with Appendix B to this report, which is a working list of the existing shoreside businesses that comprise the infrastructure that supports commercial fishing in Gloucester today.

While the panel focused in this project on shoreside infrastructure rather than on the fishing industry itself, it was necessary to consider two aspects of the industry when examining shoreside infrastructure: the number and size of vessels fishing from Gloucester and the types and volumes of species landed in Gloucester. Thus, this discussion of selected elements of Gloucester's shoreside infrastructure begins with a preliminary note on vessels and catch. (It should be noted, moreover, that the panel is well aware of the need to study other aspects of the industry critical to the shoreside infrastructure, most notably labor, but it has not yet undertaken that part of the study.)

### A. Preliminary Note on Catch and Vessels

*The Size and Composition of the Catch*

Gloucester is, and has been, a groundfish port. In the 'modern,' post-Magnuson era, groundfish revenues have accounted for between 78 percent (1984) and 43 percent (2002) of all landings in Gloucester (see figure 1 showing groundfish revenues as a percent of all Gloucester landings each year from 1975-2002).[6] As is well known, groundfish landings in Gloucester were highest in the late 1970s and early 1980s, fell significantly in the late 1980s, increased in 1990, and then fell again in the 1990s (see figure 2 showing Gloucester's groundfish landings from 1975-2002).[7] Starting in 1993 with the emergency closure of Georges Bank, the past decade has seen increasingly intensive regulation of the groundfishery and an accompanying decrease in landings. In 1981, the year of the highest groundfish landings in the 'modern,' post-Magnuson era, 81 million pounds of groundfish were landed in Gloucester; in 1997, the year of the lowest groundfish landings in Gloucester in this same period, 11 million pounds were landed. And, as the Council has calculated, between 1994 and 2001, groundfish revenues accounted for between 60.5 percent and 71.4 percent of the revenues of multi-species permitted vessels homeported in Gloucester (such vessels account for 87 percent of federally permitted vessels that identify Gloucester as their 'principal port').[8]

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[6] All figures are contained in Appendix C

[7] . Total landings (all species combined) in Gloucester for the period 1975-2002 show the same pattern of decline since the 1980s shown by Gloucester's groundfish landings (a function of the dominance of groundfish). See figure 2.

[8] DSEIS, Vol II, Table 542. Of 288 federally permitted vessels listing Gloucester as principal port in 2003, 251, or 87 percent, have multi-species permits. NMFS online permit database, query run in March 2003.

Other species currently landed in Gloucester include lobster, monkfish, tuna, hagfish, herring, mackerel, whiting (silver hake), and scallops. Some of these are being landed in increasing quantities in recent years (monkfish, lobster, hagfish, and mackerel, for example). Others are being landed in decreasing quantities in current years (whiting and shrimp, for example). Herring has had a cyclical pattern of landings; landings increased significantly in 2001 but decreased somewhat in 2002. Some species landed in the recent past are now not landed at all or in very small quantities (dogfish, sea urchins, crabs), and some fluctuate, such as swordfish, which was landed in some quantity between 1985 and 1995 but not again until 2001. See the graphs of Gloucester landings, by species, for the years 1975-2002, in Appendix C.

*The Number and Size of the Vessels*

The number of vessels based in Gloucester has declined significantly, as has the average size of a Gloucester vessel.[9] It is difficult, however, to determine the precise number of vessels fishing from Gloucester (or most any port), now, or in the past. Lists of federally and state permitted vessels associated with the port are helpful but can be misleading.[10] First, as is well known, some permitted and registered vessels are not active. Second, even if a vessel is fishing, its 'homeport' or 'hailing port' is often not a good indicator of the port out of which it fishes. In the words of one knowledgeable panel member, an attorney: "It doesn't make any difference where the boat is homeported; it doesn't mean beans." 'Homeport' is a function of the location of the regional Coast Guard office that houses the abstract of the vessel. 'Hailing port' is sometimes the principal place of business of the corporation that owns the vessel and not the port from which the vessel fishes (for this reason there are sometimes vessels with inland hailing ports). Third, some owners of Gloucester vessels specifically avoided registering their vessels in Gloucester in an attempt to obtain lower insurance rates than were available for 'Gloucester vessels' after the insurance crises of the late 70s and the 80s.

Fourth, vessels move around, and do not necessarily fish from a single port. Vessels from outside Gloucester come to fish in Gloucester, and vessels from Gloucester migrate out of Gloucester to fish from other ports. These movements may be temporary, they may be seasonal, or they may be 'permanent.' The extensive regulation of the groundfishery over the past decade has heightened this phenomenon, as boats move around in attempts to avoid closures and to make the most of limited days at sea. Fifth, and relatedly, it is common for boats fishing from one port to land fish in another.

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[9] A decline in the number of multi-species permitted vessels fishing is noted in the Council's analysis which shows that, in 1994, 184 of the multi-species permitted vessels homeported in Gloucester were 'active' (landing one or more pounds of fish), while, in 2001, only 159 of the multi-species vessels homeported in Gloucester were active. The number of active multi-species permitted vessels homeported in Gloucester dipped to a low of 143 in 1999. See DESIS, Table 542.

[10] Historical lists are also difficult to come by; while current year figures are online, historical lists may be obtained only through requests to NMFS, and our requests were unavailing.

For this reason, the number of vessels landing fish in a port is not a good indicator of the number of boats fishing from that port. Boats from Gloucester may land their catch outside of Gloucester, and boats from outside Gloucester may come to Gloucester to land their catch.

That said, the sharp downward trend in the number and size of vessels fishing from Gloucester is evident from a number of sources:

*(i) Historical estimates*

A good way to get a sense of the number of boats fishing from a port is to count the number of boats buying ice in that port. With some exceptions, boats need ice to go fishing, and thus the number of boats buying ice in a port is a good proxy for the number of boats fishing from the port. Records of Gloucester's Cape Pond Ice Company show that 182 different vessels bought ice from the company in 1981, the peak year in the 'modern,' post-Magnuson era of commercial fishing in Gloucester. At that time, Cape Pond Ice was one of two ice companies selling ice to vessels on the Gloucester waterfront (the other was the Ice Division of the Gloucester Marine Railways), and the current company president estimates that the two ice companies shared the business roughly 50-50 back in 1981. This would mean that roughly 362 vessels bought ice to go fishing from Gloucester in 1981. This does not mean, however, that all of these vessels were 'Gloucester' vessels or made repeated trips from Gloucester in that year. Some may have been fishing temporarily from Gloucester, some may have been fishing seasonally in Gloucester, and some may have landed fish in Gloucester and picked up ice as they left to go back out fishing.

One fisherman with a keen memory recalls counting the number of vessels that tied up in the Gloucester harbor in 1983 and determining that there were 138 large or medium draggers in the harbor. Most were over 60 feet long and many were in the 75-100 feet range and carried five to eight fishermen. (The same fisherman estimates that there are at present in Gloucester only about 38 draggers 50 feet or larger.)

Doeringer, Moss, and Terkla reported in 1986 that there were "somewhat more than 200 finfish boats, or 'draggers'" in Gloucester.[11]

A.T. Kearney, a management-consulting firm that conducted a study of the Gloucester fishing industry in 1994 for the Massachusetts Land Bank when the latter was deciding the manner in which to continue the development of the Jodrey State Fish Pier in Gloucester reported the following figures, as of 1994:

| **Vessel type and size** | **Number** |
|---|---|
| Groundfish trawlers (70-100 ft) | 40-50 |
| Groundfish trawlers (50-70 ft) | 70 |

[11] P. Doeringer, P. Moss & D. Terkla, *The New England Fishing Economy: Jobs, Income, and Kinship* (1986), p. 35.

| | |
|---|---|
| Gillnet boats (50-70 ft) | 60 |
| Lobster boats | 100-150 in the region |
| Purse seine vessels (60-100 ft) | 10 transient |
| 'Combination' vessels (tuna, swordfish, others) (45-70 ft) | Number indeterminate but increasing |

*Table adapted from A.T. Kearney, Gloucester State Fish Pier Redevelopment Project: Comprehensive Industry Assessment and Pier Development Plan, p. 3-2 (1994).*

*(ii) Present-day estimates*

In 1999, Cape Pond Ice Company became the sole ice company on the Gloucester waterfront.[12] The number of vessels buying ice from Cape Pond Ice Company since it became the sole ice plant in 1999 has fluctuated between (approximately) 91 and (approximately 104).[13] As indicated in the historical discussion of ice sales, these numbers represent the total number of boats buying ice in the port and so include one-time visitors, seasonal visitors, and so on. In addition to these 100-odd vessels buying ice in Gloucester, there are also in Gloucester at present at least eight large vessels that do not buy ice. These are: two 140 ft mid-water trawl herring and mackerel boats using a refrigerated seawater chilling system, two large herring purse seine vessels also using a refrigerated seawater chilling system, and four large freezer-processor vessels that have recently come to Gloucester to fish for hagfish.

Of the 100-odd vessels buying ice, panel members report that only nine are large vessels (70-90 ft), and that these nine large vessels are all that remains of Gloucester's former fleet of large groundfish vessels. Not only has the number of active boats in Gloucester declined, but, just as importantly, the average size of the active vessels has decreased dramatically.

One important factor in this decrease in the number and size of groundfish vessels in Gloucester was the 1997 buyback program that targeted Gloucester's larger groundfish vessels. Thirteen Gloucester vessels were bought back; of these, 12 were over 60 feet (five were between 60 and 70 feet; three were between 70-80 ft, and four were between 80-90 feet). Moreover, the buyback also removed 14 other vessels that fished from Gloucester though they were homeported elsewhere; of these 14, 11 were greater than 60 ft (one was between 60-70 ft, eight were between 70-80 feet, and two were between 80-90 feet).[14] The impact on shoreside infrastructure of the removal of these

[12] See the discussion of Gloucester's ice companies, below.

[13] The need to approximate is due to the fact that some vessels are billed directly by the ice company and others are billed through the auction; the ice company, which has provided its records for this analysis, has detailed records of the boats it bills directly and less detailed ones for the boats it bills through the auction.

[14] The list of the vessels and their dimensions is from a report in Commercial Fishing News, March 1998, pp. 1B, 14B-16B, citing National Marine Fisheries Service, Northeast Financial Services Office, as source. The list of the non-Gloucester vessels that had fished in Gloucester is from Cape Pond Ice records.

large vessels should not be underestimated. Larger, offshore vessels buy much more ice, fuel, gear, groceries, and so on than smaller day or two to three day trip boats; they make considerably higher revenues than small or medium vessels; and they consistently undertake major haul-outs in the summer time. One panel member put it this way: "Every boat that is bought back is a business; that [buyback] represents a business closing, and some of those businesses had gross sales of a million dollars, in a million dollar range. That's a significant business to close down, for this community."

**B. Buyers and Processors**:

**1. Groundfish**

*The Seafood Display Auction and Groundfish Buyers*

The Gloucester Seafood Display Auction opened at the end of 1997. It is owned and operated by a family that formerly owned and operated a fish processing facility on several locations on the waterfront (Star Fisheries, and, prior to that, Morning Star). The decision to invest in the auction, family members have said, was based partly on the fact that Amendments 5 and 7 to the groundfish management plan were working to rebuild groundfish stocks. The business aimed to position itself as a central site for buying high quality groundfish when the stocks were rebuilt. The Auction has become the focal point for the buying of groundfish for out-of-town processors (either directly or through local brokers). There are about 14 regular buyer/processors from outside Gloucester, and about 10 regular buyers from Gloucester. Of the Gloucester buyers, some are buyer/brokers who buy for others or re-sell as soon as they buy (around six); and some are buyer/processors who process the fish at their facilities on the Gloucester waterfront (three). Of the latter local buyer/ processors, two of the three buy fish directly from boats as well as at the auction. After the auction opened, at least one fish dealer stopped buying groundfish altogether and focused instead on species not handled by the auction (lobsters).

The Auction is a display auction and is credited by many for having helped the development of a market for quality fish, and for having helped boost groundfish prices. It is also credited with bringing a substantial number of boats from outside Gloucester to land fish in Gloucester (in 2001, for example, there were close to twice as many boats landing groundfish in Gloucester as were homeported in Gloucester: 261:149).[15] Many of these boats pick up shoreside services (ice, fuel, etc) when they are here to land fish. The Auction has experimented with auctioning a variety of species – tuna, lobsters, swordfish, hagfish – but its greatest success has been in selling groundfish, and today it is principally a groundfish auction.

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[15] DSEIS, Vol II, Tables 541 & 542.

*Groundfish buyer/processors*

There are three groundfish processors on the Gloucester waterfront today: Ocean Crest, Pigeon Cove/ Whole Foods, and Steve Connolly Seafood Co., Inc. Ocean Crest cuts only about 10 percent of what it buys and it acts as a wholesaler for the balance, selling to processors in Boston and New York. The ten percent or so that it cuts it sells locally, to restaurants on Cape Ann. Ocean Crest also makes a fertilizer/ animal feed product from groundfish waste (more oily fish, such as herring or salmon, is not suited to its process); it distributes this product, 'Neptune's Harvest,' throughout the United States and internationally (to Sri Lanka, Mexico, Italy, and elsewhere). This processor employs about 30 employees, including 2-3 hand cutters. Up until the late 1980s, the company was a relatively large groundfish processor, employing 50-60 people, significant numbers of whom were cutters and packers. The company started the fertilizer/ feed product shortly after cutting back its processing capacity.

A second groundfish processor is Pigeon Cove/ Whole Foods. This facility supplies Whole Foods Markets throughout the country with high quality groundfish from NE and processes the groundfish in its 17,000 sq ft facility on the waterfront (using hand cutters). It buys groundfish in Gloucester, but also in Portland and is starting to do so in New Bedford and NYC as well. Pigeon Cove/Whole Foods also buys some non-groundfish species locally (scallops, some mackerel, shad, stripers). The facility also processes a wide variety of species imported or bought elsewhere in the United States, and it acts as a distribution center for a host of value-added products made elsewhere. Only about 33 percent of the total value of this facility's product comes from North Atlantic caught fish, and only a piece of this 33 percent is fish landed in Gloucester. The facility has 35-37 employees and has plans to expand.

The third groundfish processor on the Gloucester waterfront is Steve Connolly Seafood Co., Inc. This is a Boston-based firm with a satellite operation (albeit a sizeable one) on the Gloucester waterfront. Like many Boston processors, Steve Connolly has recently expanded its Boston facility. Steve Connolly buys and processes a wide variety of species worldwide; groundfish is only one of many types of fish bought and processed by Steve Connolly, and Gloucester is only one of many sources of fresh groundfish for the company.

In addition to these three sizeable groundfish processors, there are approximately eight very small businesses that rent space on the waterfront and buy and cut (and in one case smoke) groundfish in Gloucester. Of these, some are 'one or two man bands' that cut 10 boxes of fish and sell it themselves to fish restaurants along the coast in New Hampshire; some sell retail in Gloucester or nearby; and some sell to restaurants in Gloucester and nearby. Four of these very small businesses rent space in the facility of a company, John B Wright, which formerly operated a groundfish processing business but which now is in the business of buying and selling fish (and renting out its facility).

**2. Non-groundfish species***:*

There are nine lobster buyers on the waterfront; five tuna buyers; two sea urchin buyers; and three herring buyers. In the case of lobster and tuna, there is no processing involved; as one lobster buyer put it, "I'm basically just a shipping company." In the case of sea urchins, there is processing involved, but the market for sea urchins and the supply of urchins have both decreased significantly. In the case of herring, two of the buyers do not process the herring but sell it for bait (Aram and D & B Bait). A third herring buyer, Cape Seafoods, has a larger operation, operates two of its own vessels (each one 140 ft) and freezes whole herring and mackerel and exports them to Africa as food fish. As Cape Seafoods merely freezes whole fish, it does not do much processing of the fish; however, the owners and plant manager have expressed interest in expanding operations to process these pelagics. They have also expressed their hope and expectation that Gloucester will become, as it once was, a center for small pelagic fishing.

In addition to these buyers, there are three buyer/processors of non-groundfish specialty species on the waterfront. New England Marine Resources focuses on buying and processing hagfish, monkfish, and other species bound for markets in South Korea and Japan. Intershell International focuses on scallops, clams, and various specialty products. And finally, a recent addition to the waterfront's processing capacity is Zeus Packing, which packs whole whiting for Spanish markets.

**Additional Notes on Fresh Fish Processing in Gloucester:**

1. There are several large-scale fish businesses in Gloucester, which, until the 1960s or so, caught and processed fresh fish landed in Gloucester. Around that time, however, the large-scale companies began to rely on fish landed outside Gloucester. Much of this fish was imported, and much of it came into the port as frozen product, in large frozen blocks. Today, those large companies or ones evolved from them (Gorton's, Good Harbor Fillet, North Atlantic Fish, etc.) continue to rely exclusively on frozen product landed outside New England or imported into the United States. These frozen fish processors have little to do with commercial fishing in Gloucester. One panel member, a fisherman, said of the large, frozen fish processors, simply: "They don't deal with us." The division between the frozen sector and the fresh sector has been firmly in place since the 1970s.[16] The infrastructure that supports the two sectors – the frozen sector and the fresh sector -- is largely distinct. The commercial fishing industry (that which lands New England caught fish in Gloucester) may derive some benefit from the trucking services within the port used by frozen sector and, recently, has begun using freezers (for the frozen hagfish processed at sea and for the herring and mackerel frozen on the waterfront). Other than these, however, no apparent benefits flow from the frozen imported (or non-New England) sector to the fresh or New England sector. However, it may well be true that the existence of the commercial fishing sector – the 'New England'

[16] D. Terkla & J. Wiggin, "Gloucester Waterfront Study: Land Use and Economics," (Appendix 5 of the Special Resource Study for Gloucester, Massachusetts), p. 55 (1994).

sector – is important to the frozen block sector, as the latter may derive value from being located in, and associated with a working fishing port even though they do not participate in fishing industry at work in the port. 'Gortons of Gloucester' will carry less cachet if Gloucester loses its fishing industry.[17]

2. There has been a large decline in fresh fish processing on the Gloucester waterfront since the late 1980s. A number of groundfish processors are no longer in business cutting fish (e.g., John B Wright) or have radically cut back their operations (e.g., Ocean Crest). Empire Fisheries and Star Fisheries, once large scale fish cutting operations for groundfish, whiting, and other species ('We did it all,' said an owner of Star Fisheries), have long since ceased operations. A shrimp processor that bought from a large number of boats in the eighties and early nineties closed up shop. So too did a jonah crab processor in the 1990s. As a result of this substantial decline in processing on the Gloucester waterfront, most groundfish is sent to Boston or New York for cutting. Boston has become the regional center for fish cutting, with several firms building large new facilities. Those boats that still fish for whiting typically truck their catch to buyers at Fulton Fish Market in New York (at a cost of 8 cents a pound, a not insignificant cost for a high volume, low value fish).

3. At least two of the newer fish processors that process non-groundfish species use so-called 'workforce labor.' These are people supplied by temporary agencies, on a temporary basis. One company uses this labor source for peak periods (bringing in 20 people to add to its regular staff of about eight during busy periods), and the other, a seasonal business, uses this labor source as its sole source of labor. People who are part of the 'workforce' labor supply generally do not live in Gloucester or Cape Ann but travel into the city to work.

4. Very little fresh fish waste is processed in the port today. Ocean Crest is the only one doing so. Another company processed waste (including salmon waste which was trucked in from elsewhere) into oil up until 2002. At that time, the company, which had been located at John B Wright's, relocated to New Brunswick, Canada. Cape Seafoods, the herring/mackerel company, trucks its fish waste to Canada. In 1985, the Lipman 'de-hyde' plant, which had processed herring and menhaden into industrial products, shut down (thereby ending the menhaden fishery in Gloucester). Many stories are told of the grim last years of this plant, when waste lay in the open air on barges and the smell knocked people over. A number of members of the fishing industry in town have expressed keen interest in a new, state-of-the-art, sanitary reduction plant on the waterfront, the type, one man explained, that can be found in the middle of cities in Norway where no one knows of its existence (it being so un-obstrusive and un-smelly).

5. Wastewater pretreatment is at capacity locally and without an increase in that capacity it is not possible to increase fish processing in Gloucester. Fish processing generates a good deal of wastewater and the existing wastewater pretreatment

[17] Moreoever, Gorton's of Gloucester, a mainstay of the frozen block sector, has recently started an online fresh fish business. See www.gortonsfreshseafood.com.

plant cannot handle any increases over what it currently handles. Possible ways around this problem include a plant that has its own wastewater pretreatment facility (a very expensive option) and the pooling of resources of multiple plants to build a facility jointly (a suggestion in the 1999 Gloucester Harbor Plan).

6. There is also an insufficient supply of fresh water in Gloucester to support additional processing of fish (abundant fresh water is required for processing). One suggestion for overcoming this obstacle that has been suggested is the desalinization of seawater.

7. Finally, the concept of 'value-added' is one that has captured the imagination of many waterfront entrepreneurs. A small business incubator for value-added food products (basically a large up-to-code kitchen for multiple users, supervised by knowledgeable persons) has been suggested, as well as means of making 'ready to eat' meals out of fresh seafood much like the frozen processing sector does with frozen seafood.

### C. Ice Companies

*Ice Sales in Gloucester, 1987-2002*

For the past four years, there has been only one ice company in Gloucester – the Cape Pond Ice Company – to provision fishing vessels with ice and to provide a back-up supply of ice to fish handlers and fish processors (or a sole supply in those cases where handlers or processors do not have their own ice machines). Gloucester's other ice facility, the Ice Division of the Gloucester Marine Railways, fell into disrepair in the 1990s and finally closed in 1999.

Since 1990, total fishing-related ice sales in Gloucester have fallen by two-thirds. This can be seen in figure 14, which shows the combined fishing-related ice sales of Cape Pond Ice and the Railways Ice Division for the years 1987-2002 (the years for which data is available). In 1990, 22,780 tons of ice were sold, while, in 2000, 7052 tons were sold. Since 2000, the figure for total fishing-related ice sales in Gloucester has remained steady at just above 7500 tons/year.

Moreover, were data available for an earlier 10 year period (1977-1987), they would show an even steeper decline in total fishing-related ice sales. That earlier decade saw the highest landings in Gloucester in the 'modern', post-Magnuson era. In 1981, for example, total landings in Gloucester were 1.4 times greater than they were in 1990, and total groundfish landings were 2.3 times greater than they were in 1990 (see figures 2 and 3).

This precipitous decline in fishing-related ice sales has had dramatic effects on both ice companies in Gloucester. In the case of the Marine Railways Ice Division, as indicated, its machinery fell into disrepair and it went out of business. The

disrepair was a function of a lack of investment in maintenance and repair of the machinery; an employee of the Railways stated, "I was embarrassed to serve ice [towards the end] – 50 percent of the time it would be a failure." In the case of Cape Pond Ice Company, the business has had to diversify away from fishing-related ice sales in order to survive and to be able to continue to provide ice for fishing related uses.

*Cape Pond Ice Company*

Cape Pond Ice has been in business in Gloucester since 1848. It is a small, privately held business that has had only three sets of owners (all three of which have been families) in its 155-year history. The current owners, members of the Memhard family, bought the business (a majority of the shares) in 1983, and they have owned and operated the business for the past 20 years. Scott Memhard, the company's president and an owner of the company is a long time director of, and currently president of, the Cape Ann Chamber of Commerce; a director of the Cape Ann Commercial Fishermen's Loan Fund (since 1985); and a board member of the Gloucester Fisheries Commission (since 1986). He is also past director and past president of the New England Ice Association; a corporator of the Cape Ann Savings Bank, and past board chair of the Unitarian Universalist Church in Gloucester.

Cape Pond Ice has supplied ice to fishing vessels and to fish handler/processors from its inception in 1848. It was the first company in Gloucester to supply boats and processors with ice, as, prior to that, fish had been cured with salt or brine. Cape Pond has had competitors in Gloucester over its many years but none since 1999, when the Railways closed its Ice Division. Since 1999, Cape Pond Ice has been the sole source of supply for vessels, and the sole source of 'back-up' supply for processors. (Most fish processors and handlers have their own ice-making machines, and they buy ice from outside only when they need more than their own machines can make or when their machines break down.)

The current Cape Pond Ice plant, which is located on the waterfront, was 'state of the art' in 1948. It consisted originally of two 150 ton/day block ice-makers (for a total capacity of 300 tons/day). In the 1980s and 1990s, the company spent over two million dollars maintaining, repairing, and modernizing the plant: The company replaced the original cork-lined ice warehouse with a re-insulating refrigeration warehouse; added a 50 ton/day turbo nugget ice-maker to the original two 150 ton/day block ice-makers; maintained the two block ice-makers (replacing compressors, condensers, and other parts); and repaired or replaced roofs and wharves.

The company leveraged itself in 1992 to add the modern 50 ton/day turbo nugget ice-maker. The company made this major investment to ensure redundancy in the facility's ice-making capability. Redundancy in ice-making plants is important because if the ice machine breaks down, boats cannot go fishing. (Moreover, Cape Pond serves as a back-up supply of ice to processors and handlers when their own ice machines break down.) For some years after the 50 ton/day ice maker was added to the facility, Cape Pond Ice had a 350 ton/day capacity (the two original 150 ton/day block ice makers and

the new 50 ton/day turbo nugget ice makers). Recently, however, one of the original 150 ton/day block ice makers broke down, and despite its spending $30-40,000 in an attempt to fix the machine, the company was not able to repair it. The company's investment in the modern, turbo 50 ton/day ice maker, therefore, was prescient if expensive. Today, only the existence of the new ice maker ensures the necessary redundancy in the (now) 200 ton/day ice plant. This focus on maintaining the machines and providing for redundancy has paid off, it should be noted, as the Cape Pond Ice plant has never broken down in the 20 years of its current ownership. The importance of ice plant maintenance was underscored in the month of October 2003 when the sole ice plant on the waterfront in Portland, Maine, broke down. Several Portland vessels called Cape Pond Ice to ensure the availability of ice and then steamed to Gloucester to pick up ice to go fishing.

Cape Pond's fishing related ice sales have followed the pattern of the general decline of ice sales in the city (reviewed above) and the associated decline in landings. Over the past 20 years, Cape Pond Ice's fishing-related ice sales (sales to vessels and processors) have declined from a high of nearly 18,000 tons in 1984 to a low of just under 5000 tons in 1997. (See figure 15). In six of the nine years since Amendment 5 went into effect in 1994, Cape Pond's fishing related ice sales were between 7000-7500 tons/years. The exceptions were in 1997 (when Amendment 7 went into effect and fishing related ice sales fell to just below 5000 tons/year) and in 1998 and1999 when Cape Pond Ice sold ice to large herring vessels recently arrived in Gloucester. In those two years, the company's fishing related ice sales increased to 11,462 tons (1998) and 9,960 tons (1999). In 2000, these herring vessels changed over to a refrigerated seawater chilling system, and as a result no longer needed ice. In 2000, 2001, and 2002 – years, it should be noted, when Cape Pond Ice has been the sole provider of ice to vessels and sole back-up ice supply for processors and handlers – the company's fishing related ice sales have been 7052 tons (2000), 7633 tons (2001), and 7583 tons (2002). See figure 15.

In order to stay in business, Cape Pond Ice has diversified its ice business to provide ice for non-fishing related uses. During the 'Big Dig' in Boston, the company sold ice to cool concrete pours on the Third Harbor Tunnel and the Central Artery. It provides ice to chill produce and poultry; it sells packaged ice, ice sculptures and shot luges; it sells dry ice for multiple uses, including special effects in locally made films; and, since 1998 when the movie *The Perfect Storm* sent the company's name out into the wider world, it has been selling logo T shirts, sweatshirts, and caps. Sales for fishing-related uses of ice accounted for 77 percent of the business in 1984, but have accounted for only 30-40 percent of the business since 1997. In 2002, fishing-related sales accounted for 36 per cent of the business. See figure 16, which shows the percent of Cape Pond's business from fishing-related ice sales from 1984-2002.

Despite these efforts to diversify, Cape Pond Ice has had to defer maintenance, cut back on staff, and defer salary payments. The continued low sales for fishing-related uses and the instability of the non-fishing related uses (concrete related sales fell by a half from 2001 to 2002 as the need diminished for ice to cool concrete pours in the 'Big Dig') have made these cost-cutting and cost-deferring measures

necessary. The company has high maintenance costs (the machinery must be maintained year-round even though its principal use is in the summer months). The two major inputs in making ice – water and electricity – have both increased in cost by 75 percent over the past four years. And, like other waterfront businesses, the ice company has high insurance costs (rates went up throughout the waterfront after 9/11). As a result, costs that can be deferred – even if they really should not be – have been deferred. The wharves, for example, have not been repaired for two years running, while usually they are repaired every year.

In 2002, the six-foot by twenty-foot 'Now Hiring' banner that the company fixes to its building during the annual hiring season was fixed to the building, but this time it read 'Now Firing.' Two years ago, the number of year-round employees was seven; this past year it dropped to five (a president; a plant manager; a service manager; a maintenance mechanic; and a general helper). Of these five, two were cut to part-time; a sixth, a driver, went from 'part time' to 'on call.' In the summer, when the bulk of the ice company's business takes place, the number of employees fluctuates between 15-25; last summer it was 19. Despite these difficulties, there are long-term relationships between the company and its employees; one young man, for example, has worked at the company for eight years, all through college and then after college.

The capacity of Cape Pond Ice's machines – even at 200 tons/day – is more than is needed for the fishery at present. Scott Memhard remarked: "We don't have those days when the offshore dragger was pulling up, taking 20 tons of ice, and going off for 10, 15, 20 days, coming back, maybe taking a day or two off, and then going back out and doing it again. That's like an ancient dream." Cape Pond has sufficient capacity to provide ice to an expanded fishery in the future, provided it can continue to maintain its wharves, its machines, and its skilled employee base.

### D. Haul-out and Repair Facilities

There are two facilities for haul-outs and repairs of fishing vessels over 40 feet: the Gloucester Marine Railways and Rose's Marine. In addition, there are three other facilities that principally serve recreational vessels but which can and sometimes do service small (40 ft and under) commercial vessels (Cape Ann Marina, Brown's Marina, and Beacon Marine).

*The Gloucester Marine Railways*

The Gloucester Marine Railways was started by a group of five fishermen in 1953 to provide haul-out facilities for their vessels and other vessel services (fuel and ice). The five fishermen bought an existing facility and in time the Railways occupied two key sites on the Gloucester harbor; one large site at the end of Rocky Neck and another, centrally located site on Harbor Cove. The facilities provided maintenance, repair, and haul-outs; settlement services; a place to buy fuel; and a place to buy ice.

Today, after two bankruptcies in the 1990s, the Railways occupies only one of the two sites (the Rocky Neck site); it has closed its ice division (its machine having fallen into disrepair in the late 1990s); and it no longer offers settlement services. Of its fuel division sales in the past year, the Railways manager stated: "Fuel is definitely down . . . we're not selling fuel like we used to. That's been a straight line . . .if there's any little ping in it, it's just because fuel costs two dollars a gallon." The repair division has done well, however, and this is in no small part due to, in the Railways' manager's words, "jobs completely unrelated to the fishing industry." She elaborated: "We would not be here if we had to rely on the fishing industry alone." The non-fishing related jobs are repairs and haul-outs of tugboats and marine equipment (a pipeline surveyor, for example). The tugboat work in particular has been very important to the Railways: "We're becoming Towboat Central." The Railways' manager explained in full candor the effect of this change in focus. Addressing fishermen, she said:

> "Now the good news is [due to the tugboat work] we are there. The bad news is you're almost second-class citizens to me right now, you know. You're not the…, you know, where is the bread and butter? I mean, I can't, I'll take this month long job and somebody who needs something is going to be in there first, until we can get to them. We will consider you kind of a priority, but we're not sending somebody down who's been there for a month spending 60 – 70,000 dollars for something that's going to cost 2000. So, you know, even though that facility is there for you, it's not quite there for you like it used to be, I would say."

There is a widely shared view that the current absence of large vessels in the Gloucester fleet accounts for the Railway's necessary change in focus away from the fishing industry. The larger (> 70 ft) vessels now largely absent from the Gloucester fleet are the ones that can afford haul-outs every year (or can't afford not to get them) and are the type of vessel for which the original five fishermen created the Railways in the 1950s. The Railways does service some large vessels, today, it should be noted, including a few large purse seiners from Cape May who come regularly to Gloucester and have work done at the Railways while they are in the city.

Two final points about the Railways, both of which illustrate trends in Gloucester, concern the Railways' second site, at Harbor Cove. The site was sold in connection with the second bankruptcy reorganization in the 1990s. The absence of the second site makes it difficult for the Railways to perform its own maintenance even as it performs maintenance on vessels: "I would say we are not doing our maintenance because you can't put the Railway down, because you can't afford to put it down, because you can't stop working. Otherwise you don't have enough money." The Railways' manager described the pace of the Railways' maintenance work: "We are creeping along, I would say . . . creeping." The absence of the second site, to which work could be shifted, has exacerbated the maintenance problem. In 1999, the movie *The Perfect Storm* was filmed at the Railways' Harbor Cove site and, later in 1999, the Harbor Cove site was sold to a non-profit organization that has since established a Maritime Heritage Center at the site.

*Rose Marine*

At Rose Marine, the second haul-out business, things are both similar and different. They are similar in that the business was started several decades ago (in the 1960s) by a group of eight fishermen (but now it is owned principally by members of the family of one of those fishermen); in that the business has succeeded by diversifying away from fishing; and in that to the extent that it does serve the fishing industry it serves a far flung industry throughout the New England region. Rose's is different from the Railways, however, in the ways in which it has diversified, and, to some extent, in the services it offers.

In addition to hauling out and repairing vessels, Rose's sells machine parts and does machine work, and it sells fuel for vessels and for home heating. It also rents waterfront space to a whale watching business (and has done so for 12 years), rents dockage to vessels that buy fuel at the facility, stores pleasure boats in the winter, and, recently, has begun selling snowplows. Rose's manager opined that if the company had relied exclusively on fishing business, it would have disappeared "long ago." Its sales region for machine parts is the whole of New England. Twelve years ago, sales were local (walk-ins), but now more than 50 percent of sales are made to customers outside of Gloucester. Rose's manager estimates that 30 percent of Rose's business depends on the fishing industry, whereas ten years ago 75 percent of its business depended on the fishing industry.

Finally, Rose's manager offered a graphic example of the reliance of people in the fishing industry throughout the region on Rose's: He described someone in Ellsworth (Maine) calling to locate a machine part, and then jumping in his car at midnight to drive down and pick it up in the morning. The same tale was used to illustrate that the fishing industry in Gloucester has no idea how difficult it is in other harbors that have lost their infrastructure.

### E. Fueling Facilities

There are four fueling facilities (Felicia's, Rose's, the Gloucester Display Auction, and the Gloucester Marine Railways), two fuel truck services that service small vessels from the State Pier (paying an annual fee to the Pier to do so) (Cape Ann Fuel and Atllantic Discount Fuel), and two latent shoreside facilities (Fishermen's Wharf and Neptune Marine, formerly FBI Wharf). Only one of the fueling facilities (Rose Marine) has a fuel barge.

### F. Gear and Supply Shops

There are a handful of gear shops, with each one specializing in a particular gear type: there is a full service bottom trawl gear shop (although it does not

assemble bottom trawl nets and there is no facility in town that does), B& N Fishing Gear; there is a gillnet hanging service, Homeward Bound Twine; there is a new mid-water trawl gear shop separate from but associated with the large mid-water trawl herring vessels newly in Gloucester, Swan Net; and there are three lobster/gillnet/recreational gear shops (Winchesters, Coastal Marine, and New England Marine).

### G. Mooring Space

"There is never enough mooring space." This has become even more the case in recent history: DAS restrictions keep vessels tied up at port, and more vessels are 'home' at one time than has been the case before. Moreover, some families have addressed DAS limitations by buying additional boats (with their associated multi-species permits), and they keep one or more vessels in port while they fish another.

Some shoreside facilities that had offered mooring space free of charge to vessels that used their services began to charge those vessels for the use of mooring space in the summer of 2002. (Others, however, such as the Gloucester Marine Railways, have been charging all along for mooring space). As vessels fished less, they used the shoreside services less, causing the shoreside businesses to attempt to recoup some of their losses by charging for mooring space.

The Jodrey State Pier has 54 berths; all are occupied and there are 21 vessels on a waiting list for berths. Of the 54, about 50% are Gloucester vessels, while 50% are from elsewhere, from as close as Beverly and as far as New Bedford. The Pier requires that vessels berthed there be commercial fishing vessels, but does not require that they be used 100% for commercial fishing. Some fishermen have begun to run charters 'on the side' to supplement their commercial fishing, and these vessels have been allowed to stay at the State Pier, on the condition that their principal use is for commercial fishing. The State Pier charges $5.50 a foot for the berths (in 2000, the price was raised from $5 a foot).

As indicated on the list of dockage facilities in Appendix A, the industry has and needs a variety of types of mooring spaces: long-term dockside, long-term nesting, temporary (for visiting vessels); and transient (for offloading fish and taking on supplies).

### H. Intangibles: Markets, Organizations, and Visions

The panel had the following comments on some of the 'intangibles' required to support the fishing industry, and how well these needs are being met:

*Markets for fish:* When landings are down due to regulatory restrictions, market share can be lost, and a loss of market share can translate into lower prices for fish, even when supply is low (when one would normally expect prices to go up). Market

share lost to other sources of protein (chicken, soy beans, etc) is lost forever. Market share that *can* be regained (such as that lost to imported fish) can only be regained by offering product at very low prices ('low balling' the competition), and when fish dealers have to offer low prices, they buy from fishermen at very low prices.

*Financing*: Every business has its own financial 'nut' to crack: This 'nut' has three components: mortgage payments; maintenance costs (many of which are being deferred now); and basic overhead costs. Low interest loans would help the first of these (refinancing or consolidation of mortgages at low interest rates); working capital (also at low interest rates) would help the second and third.

*The Cape Ann Commercial Fishermen's Loan Fund*, a revolving loan fund, has been an important source of loan funds for fishermen since the 1970s. It makes loans to fishermen unable to obtain loans from conventional lending sources but who nonetheless are good credit risks; it has provided loans for gear, maintenance, vessel upgrades, etc. In a few instances, it has loaned money to fishermen for development of shoreside facilities owned and operated by fishermen. The Loan Fund has been working to update its policies and loan conditions (for example, it is in the midst of deciding whether it should collateralize fishing permits) but it is also struggling to stay alive. A number of factors have contributed to its current difficulties.

*Shoreside Revolving Loan Fund*: In the mid 90s, a shoreside revolving loan fund was created to make low interest loans to shoreside businesses supporting the fishing industry. This loan fund was not successful in lending out its money ($580,000 of $750,000 was not loaned out) and the money not loaned out (the $580,000) was removed from the Fund and given to the Massachusetts Finance Development Agency's Seafood Loan Program.

*Fishing industry organization(s)* – In a time when the fishing industry and its infrastructure are threatened it is critical that members of the industry participate in organizations representing their interests, ideas, and visions for the future. There are such organizations but membership is not what it should be.

*A voice for the city in the fishery management process*: With the Gloucester Fisheries Commission out of operation, there is no voice for the city participating in the management process, at the Council meetings and even more important at the Committee meetings 'where the real work gets done.'

*A vision for the harbor*: "What I don't see is a, clear concise vision of this harbor, from our city fathers, as to: do they want to consolidate this [fishing] business into one particular corner of the harbor, or do they want to keep the existing character the way it is and have [it] spread around the harbor . . ."

*Positive public relations*: "We need some kind of PR to get people interested to stay in the industry. It's hard to do that right now when all you hear is the sensationalist press that nobody's making any money, the fish are going away, the government's on top of us."

*Clear lines of communication between the city / industry and decision-makers*: The city and the industry need to be able to communicate with the state, regional, and federal decision-makers whose decisions affect the community and the industry. This includes decision- makers on the Fishery Management Council, in the Department of Commerce (the Economic Development Administration, the National Marine Fisheries Service, the Secretary himself).

*Fishing industry health plan*. Health insurance for people in the fishing industry is critical, and many people were unable to find or afford coverage before the creation of the Massachusetts Fishermen's Health Plan in the mid 1990s. The Plan covers 1800 people in the Massachusetts fishing industry, many who had no coverage at all prior to joining the MFP plan. Studies have shown that the plan saves the state money because it decreases the number of uninsured people in the state.

## IV. Some Characteristics of the Shoreside Support Businesses

**The shoreside infrastructure and the commercial fishing businesses are interdependent, to a point***:* A fisherman put it this way: "We need the auction, we need the ice company, we need the suppliers. Without them, we are nothing." Shoreside business representatives, on the other hand, said repeatedly that their troubles would be reduced if only the fishermen had more days-at-sea to fish. As one put it: "I can only survive a couple more years if we don't get an increase in days." Moreover, it was claimed that the shoreside and harvesting sectors understand each other's business challenges; a shoreside owner stated: "A boat knows what my headaches are going to be. I know what your headaches are. They're the same." There is, however, a profound exception to this truism: as demonstrated in the discussion of particular businesses above, some shoreside business are diversifying away from commercial fishing (the ice company cooling concrete, the railways servicing tugs, and so on), and to the extent this diversification takes place it works to break the interdependence of boats and the shoreside facilities that serve them. It leads to a situation in which the dependence runs in one direction (from boat to shoreside) and not the other way around.

**Nearly all the shoreside businesses providing support to commercial fishing (especially in the groundfish sector) are small, family-owned and operated businesses that have been on the waterfront for decades**. Many of these businesses were started by former fishermen or members of fishing families who chose to stay in the industry but to work on land rather than at sea. These families derive enormous satisfaction from their participation in the industry. The Gloucester Seafood Display Auction ('the Auction') is family owned and run, and is an outgrowth of that family's earlier decades-old fish buying and processing business, Star Fisheries. Cape Pond Ice has been owned and run by three successive families in its 150-year history; the current owner has owned and run the business since 1982. Felicia's Oil, a fuel business, is a 47-year old family business; it is run today by the son and grandsons of the man who started the business in 1956. It is located in the west end of the harbor, across from 'the fort' where the family lived for many years and where the founder's son was born. Most – but

not all - of the groundfish buyers/processors located on the Gloucester waterfront are family businesses (e.g., Ocean Crest, John B Wright, Capt Joe and Sons). The two facilities that provide vessel maintenance and repair services – the Gloucester Marine Railways and Rose Marine – were both started by groups of fishermen, the former in 1953 and the latter in the 1960s. The Railways is now owned by the descendants of those initial fishermen, while Rose Marine is now owned principally, and operated by, members of the Rose family.

**Like small fishing businesses, these small, family-owned shoreside businesses reinvest in their businesses, and invest their own personal assets in their companies.** When fishermen make money, they invest it in their vessels. A vessel owner described the process: "[People] have got to realize we're not a corporation that once we make a profit we don't want to spend it. We have to, we have no choice. [You have] to change a main wire . . . fix your doors . . . change twine on your net, ground cables, your electronics fry out on you . .[there are] breakdowns on the engine, pumps, everything." The point, he stressed, is that money made by fishermen goes directly into the shoreside businesses that support commercial fishing. Similarly, shoreside businesses reinvest in their businesses whenever there is an opportunity to make a return on the investment. This is partly because many shoreside businesses are family businesses with long histories on the waterfront: "These are all pretty much family businesses, still, the ones that are left on the waterfront, that are used to re-investing anything and everything into their business." ." Moreover, shoreside business owners have deferred payments to themselves in lean months in order to make payroll and other costs, and have mortgaged personal assets (homes) to secure business loans.

**Many of the shoreside support businesses rely on volume in order to be profitable, and volume is way down**. Fish and fishing businesses remain in many respects volume businesses, despite the gains in producing a quality fishery, rather than a quantity fishery. Volume is important to the auction, the ice plant, and the gillnet hanging business, among others. This is a double problem for those businesses – like the ice plant – that must maintain their high volume capacity even when volume is low.

**Gear suppliers are operating at 'pathetic' margins**: Gear suppliers are operating at 'pathetic' margins and there is no volume to make up for it. One gear business owner said that he would give his business another two years and if it didn't improve he would give it up. He explained that he had taken losses two of the last three years and he referred to his inventory grimly as his 'souvenirs. A second gear shop owner said he was within months of closing his business, and he explained the lengths he has gone to prop up his gear business: "I go lobstering to pay my payroll so that I can hang nets for guys to keep fishing. And that's stupidity on my part."

**Shoreside businesses and vessels have deferred maintenance of their structures and vessels.** Vessels and shoreside businesses are holding off on making expenditures for maintenance on their vessels and wharves. One of the many bad effects of deferred maintenance is that it leads to the need to spend large sums in order to make up for having deferred maintenance right at a time when monies should probably not be

invested. Another bad effect is the increased risk to safety: A fisherman explained that deferred maintenance on fishing vessels "is big on a lot of our minds" because it "can have severe safety implications." "A minor mechanical breakdown can lead to a sinking that leads to a disaster.

**Costs are up for shoreside businesses (insurance, utilities**): Insurance rates for shoreside businesses are increasing sharply and insurance companies are requiring improvements to shoreside properties: A shoreside fuel business just had its insurance rates raised 100 percent. It was also required by its insurance company to make $15,000 worth of improvements to its piers. A shoreside building owner, whose building houses fish businesses but is at present only partly occupied, was just visited by the insurance company and given 30 days to install $10,000 worth of improvements in the building (electric exit signs, etc.). Mass Electric rates have risen by 26%.

## V. Gloucester's Shoreside Infrastructure Today

**Until recently, Gloucester was a 'full service' port for the commercial fishing industry and a 'hub' port for the commercial fishing industry in the region.** Gloucester has been one of six commercial fishing 'hubs' in New England, supporting the industry not only within its own borders but also in various 'spoke' communities. (One of Gloucester 'spoke' communities, for example, is Portsmouth, NH.) Other hubs are or have been Rockland, Portland, Boston, New Bedford, and Point Judith; of these Rockland and Boston have ceased to be hubs. Gloucester faces a similar danger. Having only one or two businesses in each of the critical infrastructure areas, it stands to lose its status as a 'hub' if the businesses in any one of these critical areas disappear: "When you lose any one vital facility, you're no longer a hub. And when that happens, I would predict, you'll lose most of your boats that are mobile." "A lot of times we are down to one of these key pieces of infrastructure [and] if that disappears that can be the end of your harbor."

For each of the critical elements of Gloucester's infrastructure, there are only one or two businesses. Competition among shoreside support businesses is largely a thing of the past. As described, there is one ice plant (Cape Pond Ice) and one principal locale to sell groundfish (the Gloucester Display Auction). There are two businesses providing marine repairs and space for haul-outs (Gloucester Marine Railways and Rose's Marine), three places to buy fuel (Felicia's, Rose's, and the Auction), and a handful of gear shops (B & N Fishing Gear, New England Marine & Industrial, and Winchester Fishing Company). In looking at Gloucester's infrastructure, "what you want to study is presence or absence": "There used to be competition . . . . Now most of that competition is gone. . . . What's left now, you're down to the core. It's not competition any more; it's presence absence. And so the next step is absence." There is no question, under current conditions, of trying to increase competition in any of the critical infrastructure areas: "[If] we start with competition now, it's going to close businesses. You know, half a loaf for both of them, they're both out of business." By the same token,

competition in these critical areas (and others) will return "all by itself if there is a market for it."

Some elements of shoreside infrastructure are already missing from Gloucester. As described, fresh fish processing in the city is much diminished. There is no trawl net shop. Fishermen are in short supply, especially new fishermen to enter the industry and young captains to run boats. Various different types of skilled labor (welders, electricians) are absent; even lumpers and other dockside workers are in short supply.

The number of large (> 70 ft) vessels in Gloucester has declined sharply, and this is due in part to the insufficiency of shoreside services for these vessels. The number of 'real offshore boats' operating out of Gloucester now has sunk to 9. The owner of a large vessel elaborated on his decision to relocate his large vessel from Gloucester to New Bedford: Eighteen months ago, he removed a 100-ft vessel from Gloucester to New Bedford, and in so doing took business away from local suppliers (the shoreside facilities that offloaded the boat, the fueling facilities, the ice plant, the gear shop, the settlement agent and others) and the 9 crew members who ran the boat (7 crew and 2 alternating captains). He estimates that the removal of the boat removed 'many hundreds of thousands of dollars' from the city annually. He described his decision and the reasons for it: "It's a Gloucester boat, it's got a Gloucester permit. I hated to do it. But I had no choice for the survival of the boat. I couldn't get welders; I couldn't get electricians. . . . If I needed a welder I had to go outside [to bring a welder up from Westport, MA] . . . it's a hundred mile drive: it cost me 300 dollars to get a welder here and he hadn't even started to do anything yet. Electrician? Forget that: you have to go to New Bedford, you don't even bother trying in Gloucester. . . . If you want to get a generator, you have to go to New Bedford. . . . I couldn't get my crew, and I couldn't get laborers to unload the boat. . . . So for any one of those reasons and all those reasons, I took a boat out of Gloucester that generated a lot of money in this town."

**Throughout the 1990s and early 2000s, there was both public and private investment in the commercial fishing infrastructure, including in the New England groundfish sector**. Much of the public investment in Gloucester's commercial fishing infrastructure has been on the Jodrey State Pier. The 1990s saw substantial changes to the state pier, and these were the results of planning efforts initiated in the 1980s. In 1982, the Commonwealth of Massachusetts took over the management of the state pier from the city-wide association that had managed the pier since 1938 when it first opened. Part of the reason for this transfer of management, controversial at the time, was to facilitate re-investment in the state pier, which was in substantial disrepair. The state (through the Mass Development Finance Agency) undertook a complete renovation of the pier, in three phases, for a total cost of 20 million dollars. Phase one, completed in 1993, saw the demolishment of old buildings, the clean-up of diesel fuel contamination, the installation of industrial grade utilities (water, sewer, telephone duct, electrical duct), the dredging of the harbor on the south side of the pier, and, finally, the construction of dockage (45 berths, later expanded to 54 berths) on the south side of the pier. Prior to 1993, when the construction of dockage was completed, the state pier had not provided

dockage. Phase two of the redevelopment, completed in 1996, involved the demolition of the old stalls buildings, and the demolition and reconstruction of the wharves on the north side of the pier. Phase three of the redevelopment, completed in 2000 and financed by a combination of public and private investment, was the build-out of new stalls buildings on the north side of the pier.

Other recent public investment in the harbor, on a more modest scale, includes the development of a harbor plan in 1999; studies of harbor dredging needs (dredging has not taken place, however, due to controversies over the disposal of contaminated dredge material); a study of harbor lines (specifying how far out into the water private owners may build piers or floats); the removal of 5 or 6 derelict vessels that had sunk into the harbor; and the repair of seawalls. The harbor plan functions as a designated port area master plan, and, as such, enabled Gloucester to apply for and receive state funds (under the 1996 Seaport Bond Bill) for these harbor-related projects.

Among the private investments made on the waterfront in recent years are the following:

- ?? The Gloucester Seafood Display Auction, described above.
- ?? Cape Seafoods, also described above.
- ?? Pigeon Cove/ Whole Foods, described above. Pigeon Cove/Whole Foods recently expanded its fish processing center at the head of the harbor to a 17,000 sq ft facility, and would like to expand further.
- ?? Fishermen's Wharf. This was a wharf owned by a group of fishermen and their descendants, which suffered damage in a fire and which incurred substantial costs in rebuilding. The wharves were substantially repaired but promised loans were not forthcoming because of difficulties with the Economic Development Agency. Two local families, partners in a construction business, one also a fisherman and a member of a long time Gloucester fishing families, bought the property. The new owners are using the site for dockage and parking and plan to use it to support the fishery in the future when groundfish stocks are rebuilt.

**Despite these recent investments, Gloucester's inner harbor is underutilized.** Panel members offered these comments:

– *The waterfront has many dilapidated and vacant properties*. "Gloucester harbor looks pretty sad right now: the number of vacant parcels of property, dilapidated pieces of real estate, things that are not . . . in use, they're not earning their keep."

– Shoreside building owners have empty units in their properties and are being required to reduce rents in order to hold onto the tenants they do have. One 33,000 square foot building has not been fully occupied since 1998-99; at present it is 65% occupied and the owner recently reduced the rent of its fish processor tenant by 37% in order to persuade the tenant not to relocate to Lynn.

-- *Persons who are not part of the commercial fishing industry are poised to take over waterfront properties and dock space and have a good deal of money to do so*. An example given was of an old pier likely to be sold to someone who will tear down the pier and the building, "put the limits of the zoning ordinances in, then . . . just sit back and wait for the zoning laws to change."

**Gloucester's inner harbor is vulnerable to zoning changes**. Throughout Gloucester's history, the inner harbor has been committed to the commercial fishing industry: "Throughout [the city's] history, the inner harbor has been devoted substantially to the fishing industry."[18] This use of the harbor by the fishing industry is protected by several types and layers of statutes and regulations. Since 1927, the city of Gloucester has zoned much of the inner harbor for "marine industrial" use. In 1978, much of the inner harbor was determined to be a "Designated Port Area" under state law. While they differ in important particulars, both the city zoning rules and the state designated port area determination require that the inner harbor be put to marine industrial uses. Under both the city's and the state's regimes, the set of uses considered as 'marine industrial' includes commercial fishing but includes other maritime related industry as well. In addition to the city's zoning rules and the state's designated port area requirements, the shorefront area of the inner harbor is also subject to state law governing the use of tidelands, including tidelands filled in since 1857. As the shorefront area of the inner harbor has been determined to be a filled-in area, it is subject to this law, which requires that such areas be used for water-dependent uses (but not necessarily industrial ones) or for "a proper public purpose."[19]

Of these three levels of law, the first two (city zoning, and the state designated port area determination and regulations) are based on the port being used for marine industrial uses, and so could change if the port can no longer support marine industrial uses. For Gloucester, marine industrial use has always meant the commercial fishing industry and not other types of marine industry. Moreover, given certain characteristics of Gloucester's harbor (its configuration and its depth of water) as well as Gloucester's location at the end of route 128, it is unlikely that other types of marine industrial uses will be well suited to Gloucester. All this adds up to the fact that, in the absence of a commercial fishing industry in Gloucester, the pressure to remove the city's and state's legal protections for marine industrial use of the harbor will become very high. And, if these protections were to be removed, it would be unlikely in the extreme that they, or something like them, could be re-created, no matter how many fish are available for sustainable harvesting off the coast of Gloucester.

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[18] David G. Terkla and Jack Wiggin, "Gloucester Waterfront Study: Land Use and Economics" (Appendix 5 of the Special Resource Study for Gloucester, Massachusetts) (1994), p. iii.

[19] See Terkla and Wiggin, "Gloucester Waterfront Study" (1994), pp. 34-53. See also Gloucester Harbor Plan Committee, *Gloucester Harbor Plan* (1999), p. 9.

## VI. A Vision for the Port of Gloucester

This grim, inexorable decline is NOT what the Gloucester panel would like to see in Gloucester, nor is it a future that panel members believe is necessary. Instead, panel members believe that Gloucester can remain committed to the fishing industry. All share the view that the Gloucester needs to maintain a diverse fleet of small (<40 ft), medium (40-70'), and large (>70') vessels.

The small and medium day and 2-3 day boats fishing in the inshore and the larger vessels fishing 5-7 days offshore complement each other. The smaller vessels have helped create the 'quality' groundfishery for which Gloucester is now known and in so doing have helped raise the price for all fish sold in Gloucester. Moreover, the small and medium boats have developed practices for maintaining the quality of fish that the larger off-shore boats are also starting to use. In addition, the smaller vessels provide much of the supply of groundfish in the summer months (except during the two months of rolling closures) when they are not kept home by bad weather.

For their part, the larger, offshore vessels keep the market going in the winter time when they tend to use their DAS (prices are higher; the smaller boats are out less; and the bigger boats are equipped to go out in the harsh winter months). A year-round supply of groundfish is essential to maintaining the markets for groundfish and only the small, medium, and large boats working together can provide that year-round supply. In addition, the larger boats demand more shoreside services (more fuel, more ice, more work in haul-outs and repairs) and thus help to support the shoreside services needed by all the boats.

## APPENDIX A:

## GLOUCESTER COMMUNITY PANEL PARTICIPANTS
## &
## INFRASTRUCTURE PROJECT INTERVIEWEES

David Bergeron, Massachusetts Fishermen's Partnership
Corrado Buccheri, B & N Fishing Gear
Maria Churchill, Ocean Crest
Joe Ciaramitaro, F/V Virginia Surf
Laurence Ciulla , Gloucester Seafood Display Auction
Rose Ciulla, Gloucester Seafood Display Auction
Bill Crossen, F/V Odessa
Dave Ellenton, Cape Seafoods, Inc
Vito Giacalone, F/V Jenny G
David Goethel , F/V Ellen Diane
Viking Gustafson, Gloucester Marine Railways
David P. Jackson, F/V Jeopardy
Greg Ketchen, Gloucester Harbor Plan Implementation Coordinator
Don King, Homeward Board Twine
Joe Maccarone, Jodrey State Pier
Grace Maceri, Gloucester Marine Railways
Dave Marciano, F/V Angelica Joseph
Scott Memhard, Cape Pond Ice Company
John B Nicastro, Felicia Oil
Jackie Odell, Northeast Seafood Coalition
Jerry O'Neill, Swan Net & Cape Seafoods
Rosalie Parisi, All Accounts
Sam Parisi, Pier 7
Steve Parkes, Pigeon Cove/ Whole Foods
Nino Randazza, F/V Skimmer
Frank Rose, Rose Marine
Clark Sandler, F/V Sea Farmer
Marc Sandler, Sandler & Laramee
Angela Sanfilippo, Gloucester Fishermen's Wives Association
Joe Scola, F/V Dolores Louise
Chris Sherman, F/V Lady Jane
Russell Sherman, F/V Lady Jane
Brian Tarr, Cape Ann Commercial Fishermen's Loan Fund
Paul Vitale, F/V Angela & Rose

Sarah Robinson, Harvard University (PhD candidate), Gloucester Panel Coordinator

NOTE: In addition, many other people on the Gloucester waterfront graciously answered questions during informal surveys of waterfront activity conducted by coordinator Sarah Robinson and panel member Chris Sherman.

## APPENDIX B:
## A List of the Businesses, Structures, and Space Comprising Gloucester's Commercial Fishing Infrastructure in 2003

### FRESH FISH/SHELLFISH BUYERS AND PROCESSORS

### Groundfish

Auction
- Gloucester Seafood Display Auction

Buyer/processors based in Gloucester or with a Gloucester facility
- Pigeon Cove/ Whole Foods
- Steve Connolly (based in Boston but with a large Gloucester facility)
- Ocean Crest (also a wholesaler)

Small buyer/ processors based in Gloucester or with a Gloucester facility; they buy from other buyers or direct from boats but not at the Auction:
- Cherry Street Market (Based in Danvers; rents space at John B Wright)
- Old Squaw (rents space at John B Wright facility)
- Brian Fulford (rents space at John B Wright facility)
- Fish George and the Fillet Seafoods (rents space at NE Marine Resources)
- Frank's Fresh Fish
- J Turner Seafoods
- Capt Vito's Seafood (mostly or all retail)
- Sasquatch Smokehouse

Wholesale buyers/brokers based in Gloucester (they buy at the Auction or from other buyers)
- John B Wright (used to be a processor, has a Gloucester facility which it now rents to small processors)
- Sea Coast Overland Association
- A B Seafoods Inc
- Nova Seafood Ltd
- Capt Vince
- Cape Ann Seafoods
- Others

Buyers and/or processors from outside Gloucester who buy fish in Gloucester (most but not all buy at the Auction):
- Legal Seafoods (Boston-based)
- North Coast (Boston-based)
- Captain Marden's (Wellesley-based)
- Sousa Seafood (Boston-based)

Pier Fish Co (Boston & New Bedford-based)
Great Eastern Seafood (Boston-based)
Atlantic Sea Pride
Sea Fresh
New England Marine Resources (buys non-groundfish species)
Fish on Wheels
Cozy Harbor Seafoods (Portland-based)
Channel Fish Processing Co.
South Pier
Agger
Pier 7 (headquarters are in Boston)

Offloading/packing facilities (they handle the fish but do not buy it)
Gloucester Seafood Display Auction
Capt Vince

**Lobsters**

Buyers
Capt Joe & Sons
Capt Vince
Mortillaro's
International Lobster (also monkfish)
Island Lobster Ltd
Rockport Lobster Co.
Pigeon Cove Lobster Company
Pier 7 (based in Boston)
Capt Vito

**Other Species**

Buyer/ processors
Cape Seafoods (herring, mackerel)
New England Marine Resources (hagfish, monkfish, tuna, and others)
Intershell (scallops, clams, sea urchins, and others)
Zeus Packing (whiting – specialty market)
Atlantic Koam Trading (located at D & B Bait) (hagfish)
Sasquatch Smokehouse (one-person operation; smokes what he catches)

Buyers/ brokers
FWF Inc (tuna)
DFC International (tuna) – facility recently closed down, out of compliance
Cape Ann Tuna
Cape Ann Quality Bluefin

Aram (herring)
D & B Bait (herring)
Fuji Food (sea urchins)
Maguro America (sea urchins, tuna)

Offloading/ handling facilities
Americold – Rogers Street (for frozen hagfish)
Americold – E Gloucester (for frozen hagfish)

**ICE**

**Ice companies**
Cape Pond Ice Company

**Offloading/ processing facilities that make ice for their own use**
Gloucester Seafood Display Auction
Intershell
New England Marine Resources
John B Wright
Steve Connolly
Pigeon Cove/ Whole Foods
Cape Seafoods

**FUEL**

**Facilities on the waterfront:**
Felicia's Oil
Rose Marine (has a fuel barge, the only one in the port)
Gloucester Seafood Display Auction
Gloucester Marine Railways

**Oil trucks only**
Cape Ann Fuel (sells to smaller vessels)
Atlantic Discount Fuel

**Latent shoreside fuel facilities**
Fishermen's Wharf
Neptune Marine (formerly FBI Wharf)

**FACILITIES TO HAUL OUT AND REPAIR FISHING VESSELS**:

**Principal facilities:**
Gloucester Marine Railways
Rose Marine

**Other facilities:**

Cape Ann Marina (occasional, usually small vessels)
Brown's Marina (for vessels under 40 ft)
Beacon Marine (for vessels under 40 ft)

**MOORING SPACE**

**Long-term (dockside or nesting)**

Jodrey State Fish Pier (54 berths) ($5.50/ft)
Town landing (St Peter's Square)
Gloucester House Restaurant
I4C2 parcel ($3.75/ft)
Gloucester Seafood Display Auction
Rose Marine (4 vessels) (free in return for use of Rose's services)
Felicia's Oil (10-12 vessels) (free in return for use of FO's services)
Gloucester Marine Railways (20 vessels) (fee is charged)
Fishermen's Wharf (12 vessels) (fee is charged)
Capt Joe's
Atlantic Koam (at D & B Bait)
Others?

**Temporary (for visiting vessels)**

Jodrey State Fish Pier
Rose's Marine
Cape Ann Marina
Gloucester Marine Railways
Americold (Rogers St & E Gloucester)
Gorton's
Gloucester Seafood Display Auction

**Transient (for offloading fish and onloading gear and ice)**

Cape Pond Ice
Gloucester Seafood Display Auction
Americold – Rogers St & E Gloucester
Pigeon Cove/ Whole Foods
Ocean Crest

**Transient (for dockside repair):**

[none at present: potential exists at Gloucester Marine Railways & Rose's]

**GEAR AND SUPPLY SHOPS**

B & N Fishing Gear (full service bottom trawl gear)

New England Marine Industrial (lobster, gillnet, some bottom trawl gear)
Swan Net (mid-water trawl gear and potential for bottom trawl gear)
Coastal Marine (lobster and gillnet)
Winchester's (lobster and sport fishing)
Homeward Bound (gillnets and gillnet hanging service)
Nelsons (jackets, clothing, boots)
Seatronics (marine electronics)

**FOOD AND SUNDRIES**

Stop & Shop
Shaws
White Hen Pantry (day boats)
Scalifano's
Virgilio's

**OPEN SPACE FOR WORKING ON GEAR**

State fish pier (available free of charge for people berthed there, and available at $60/ day for people not berthed there; in either case space must be reserved in advance)
Felicia's Oil (available, free of charge, for people berthed there)
Fishermen's Wharf?
Gloucester Marine Railways (open space and enclosed space)
Site of the old drive-in movie theatre in West Gloucester
Fishermen's homes (their yards)

**A Study of Gloucester's Commercial Fishing Infrastructure:**
**Interim Report**

**APPENDIX C:**

**Figures 1-16:**

**Gloucester: Groundfish Revenues as Percent of Total Annual Revenues, 1975-2002**

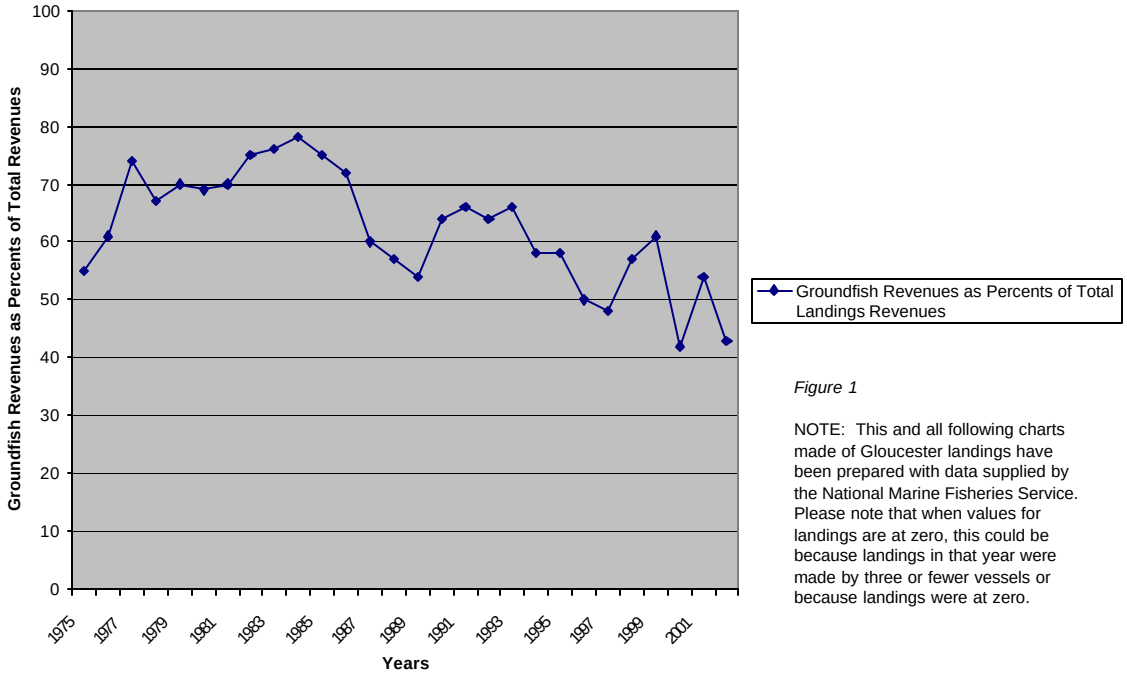



*Figure 1*

NOTE: This and all following charts made of Gloucester landings have been prepared with data supplied by the National Marine Fisheries Service. Please note that when values for landings are at zero, this could be because landings in that year were made by three or fewer vessels or because landings were at zero.

**Gloucester: Total Landings, 1975-2002**

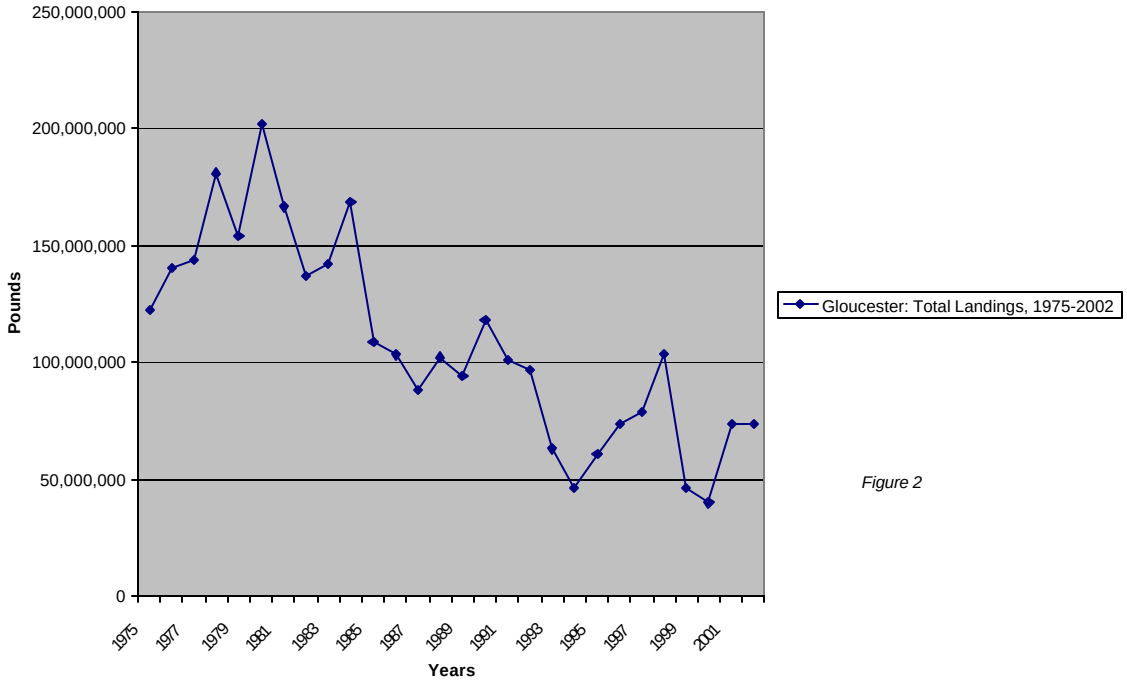



*Figure 2*

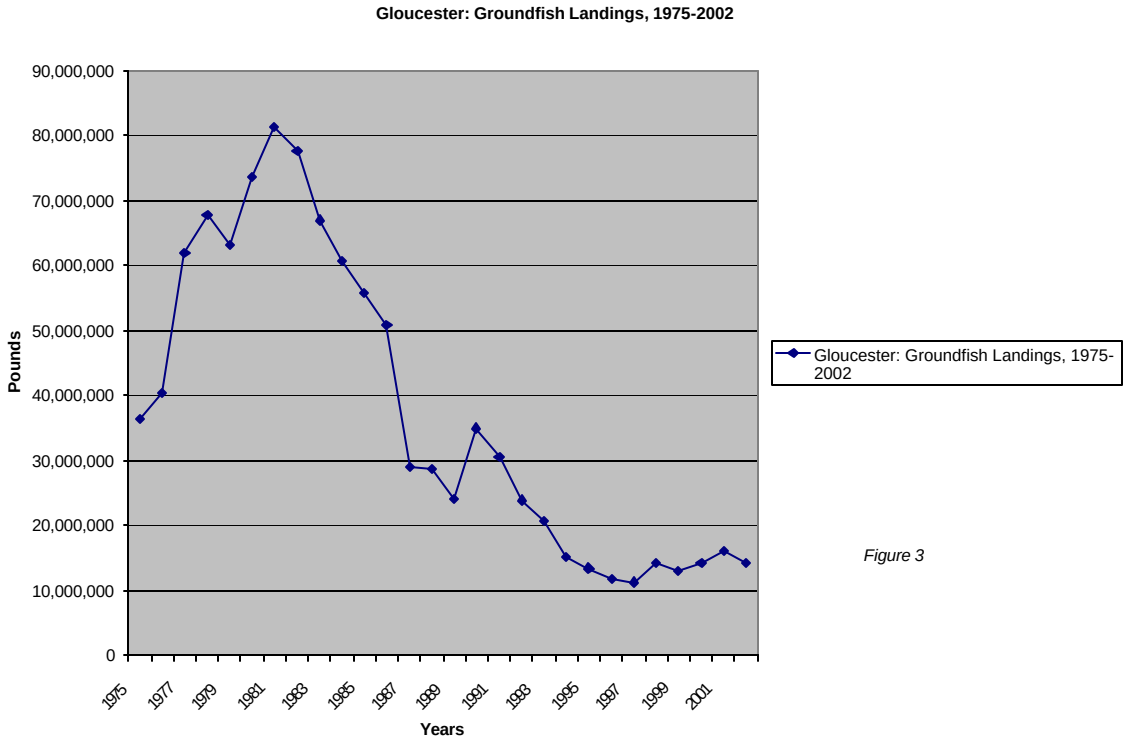



*Figure 3*

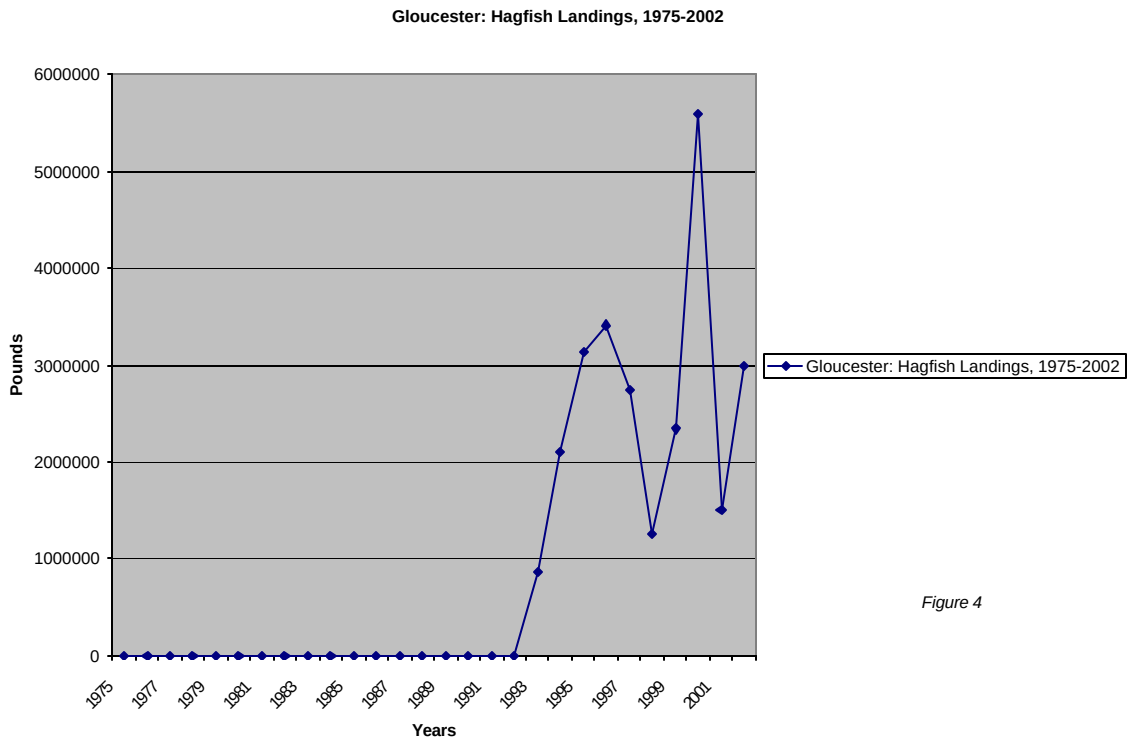



*Figure 4*

**Gloucester: Atlantic Herring and Menhaden Landings, 1975-2002**

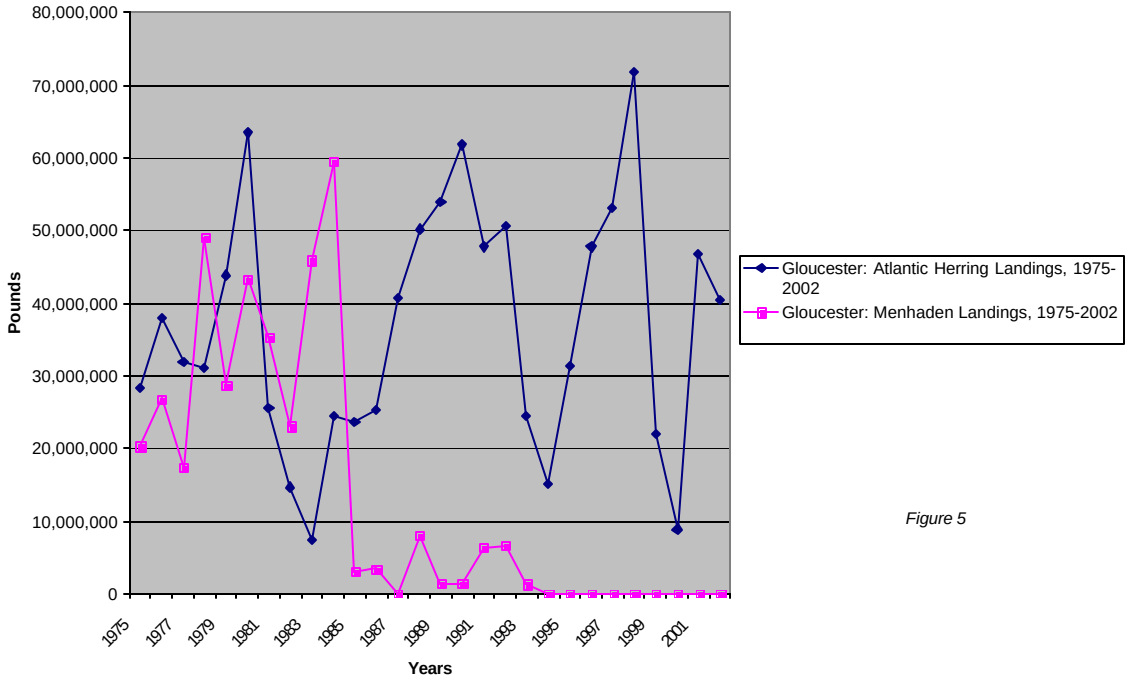
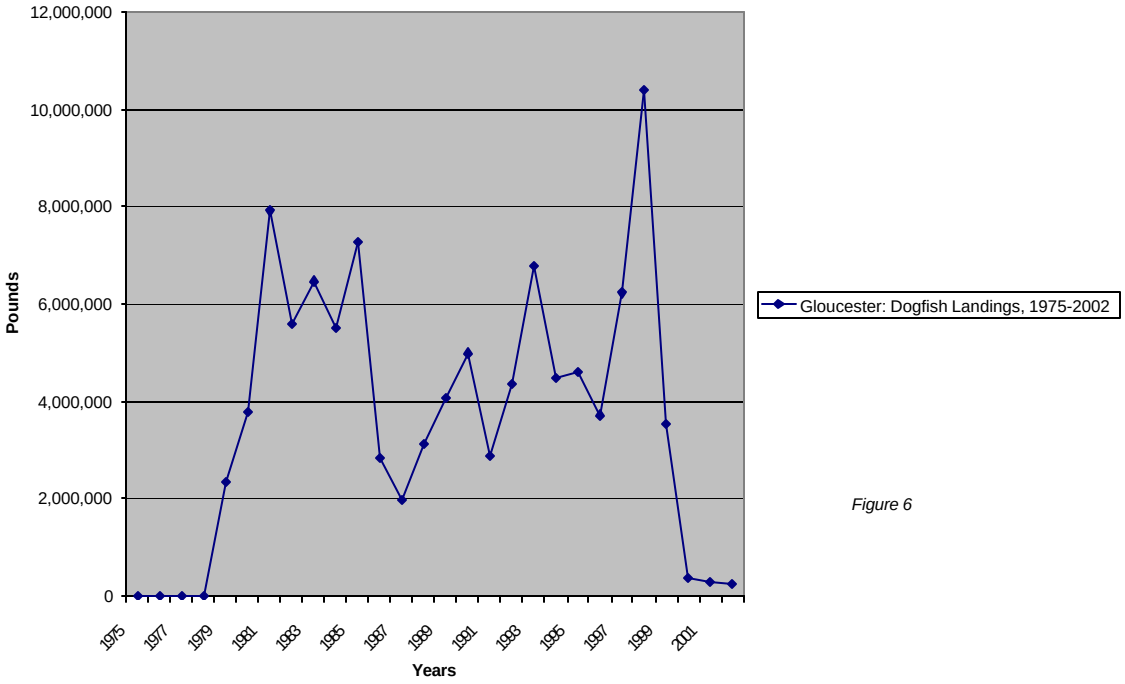



*Figure 5*

Gloucester: Dogfish Landings, 1975-2002

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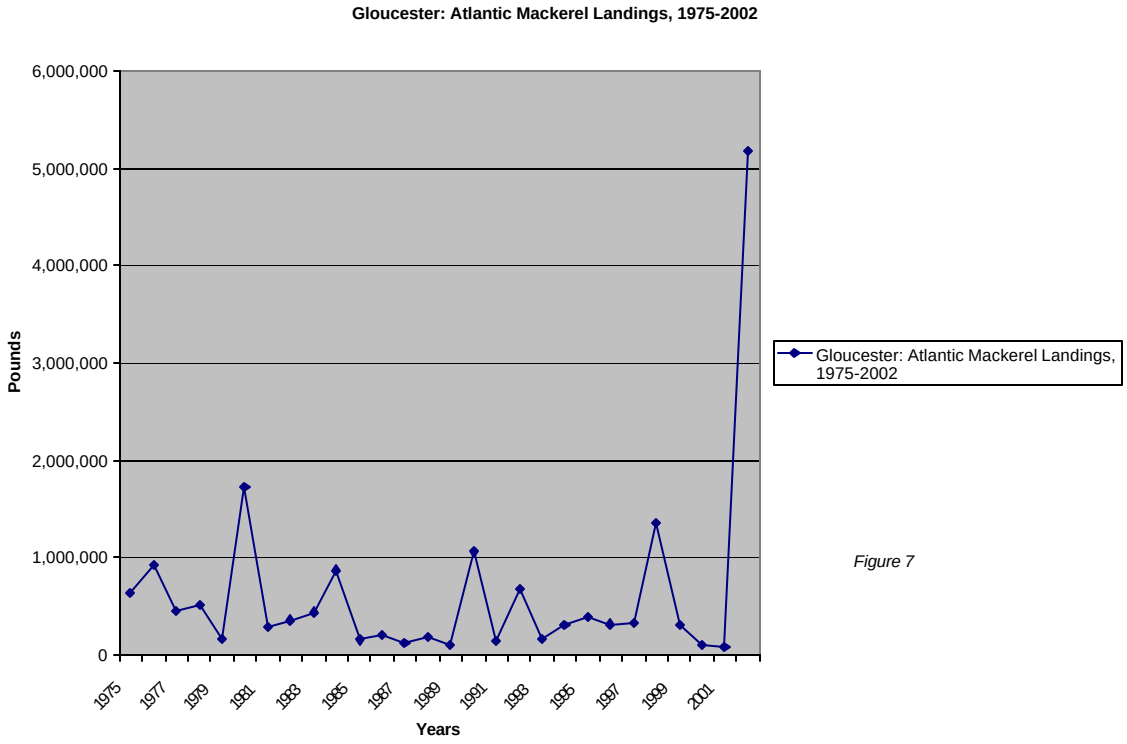


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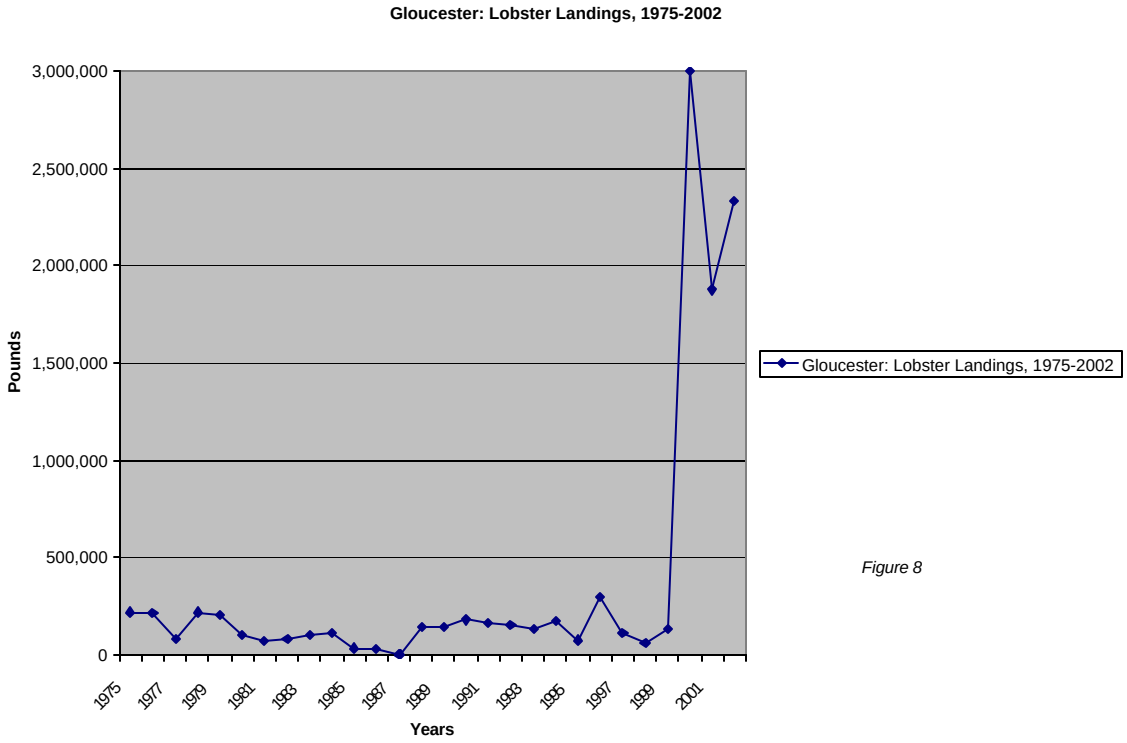


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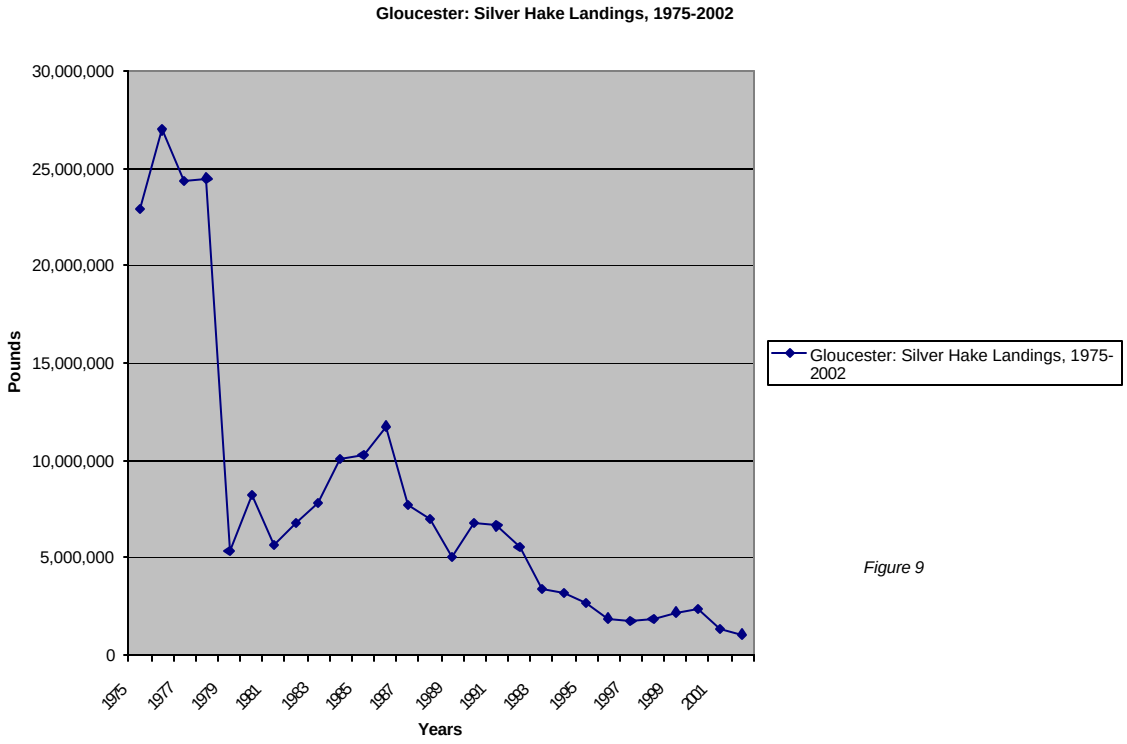


*Figure 9*

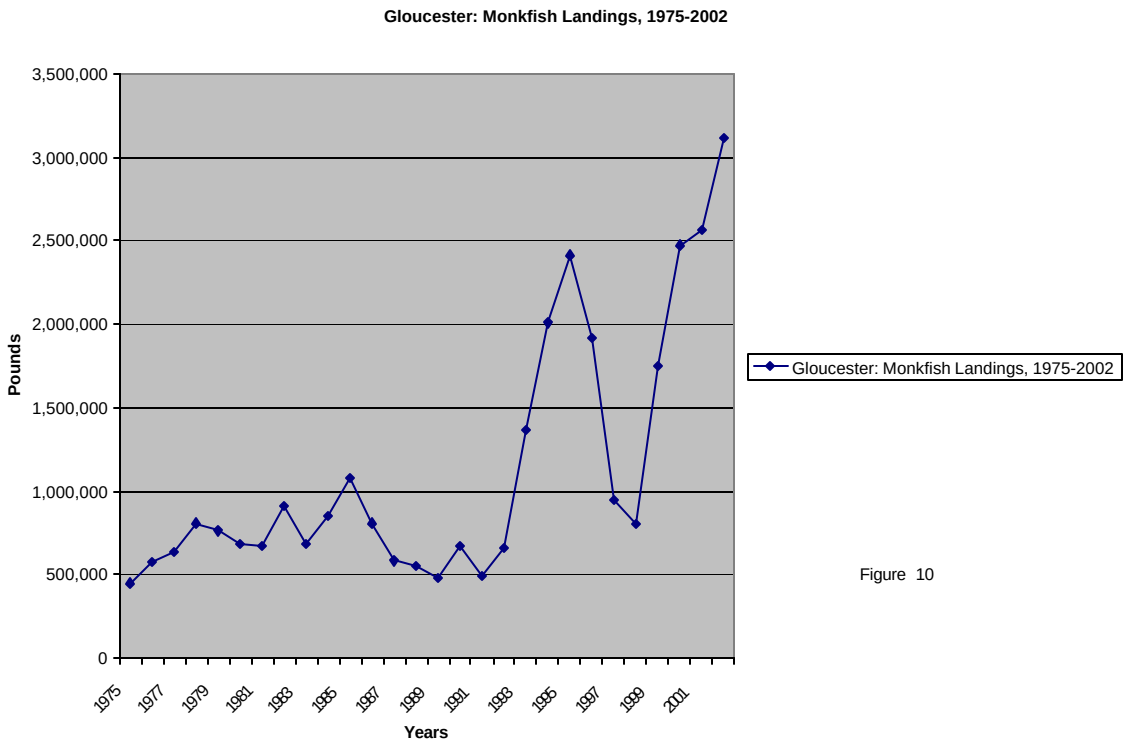


Figure 10

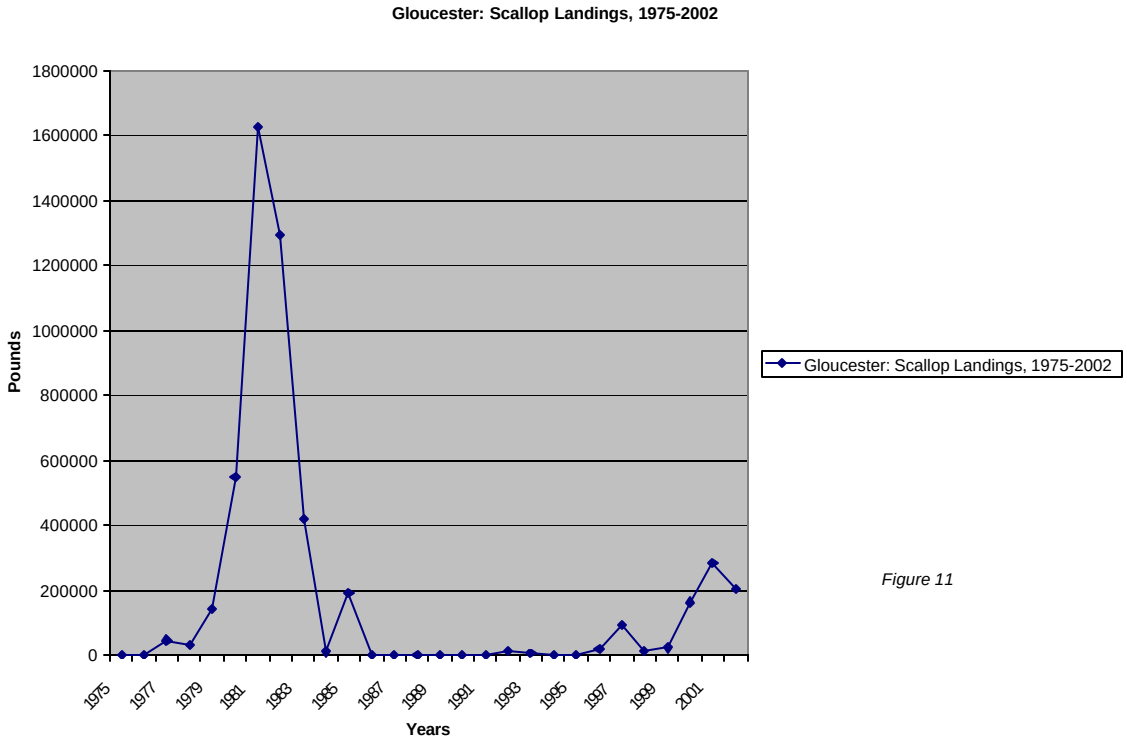


*Figure 11*

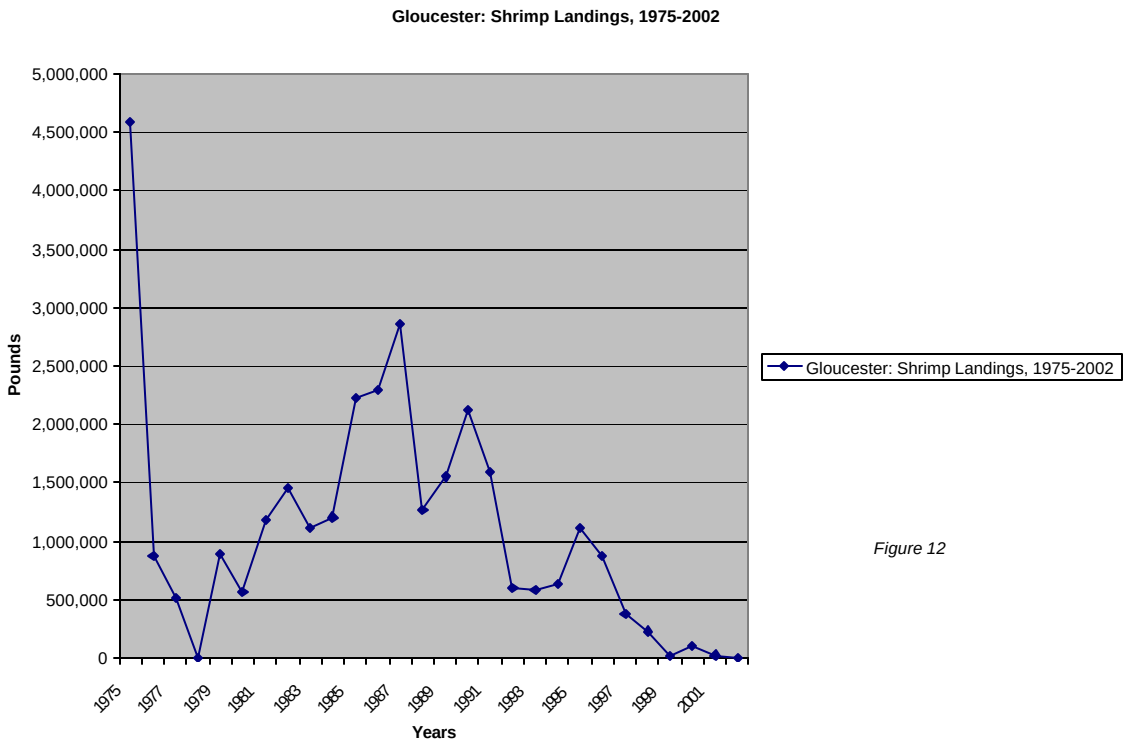


*Figure 12*

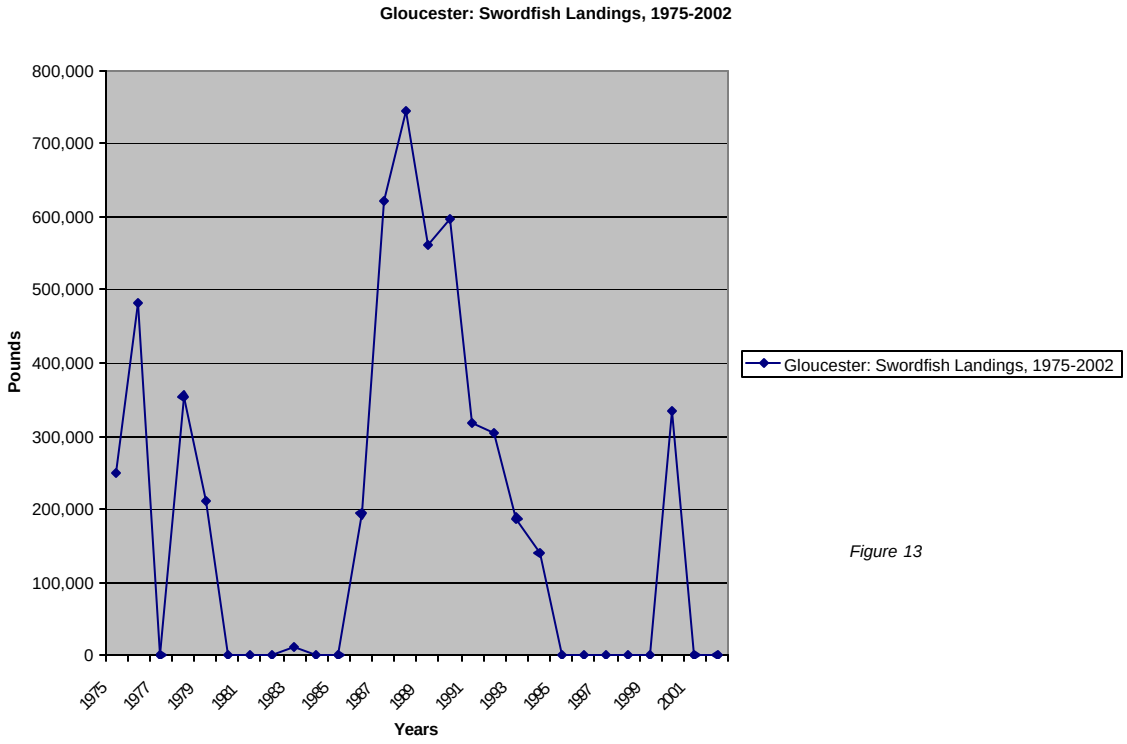


*Figure 13*

**Tons of Ice Sold for Fishing and Processing by Gloucester's Two Ice Companies (Cape Pond Ice and Gloucester Marine Railways Ice Division), 1987-2002**

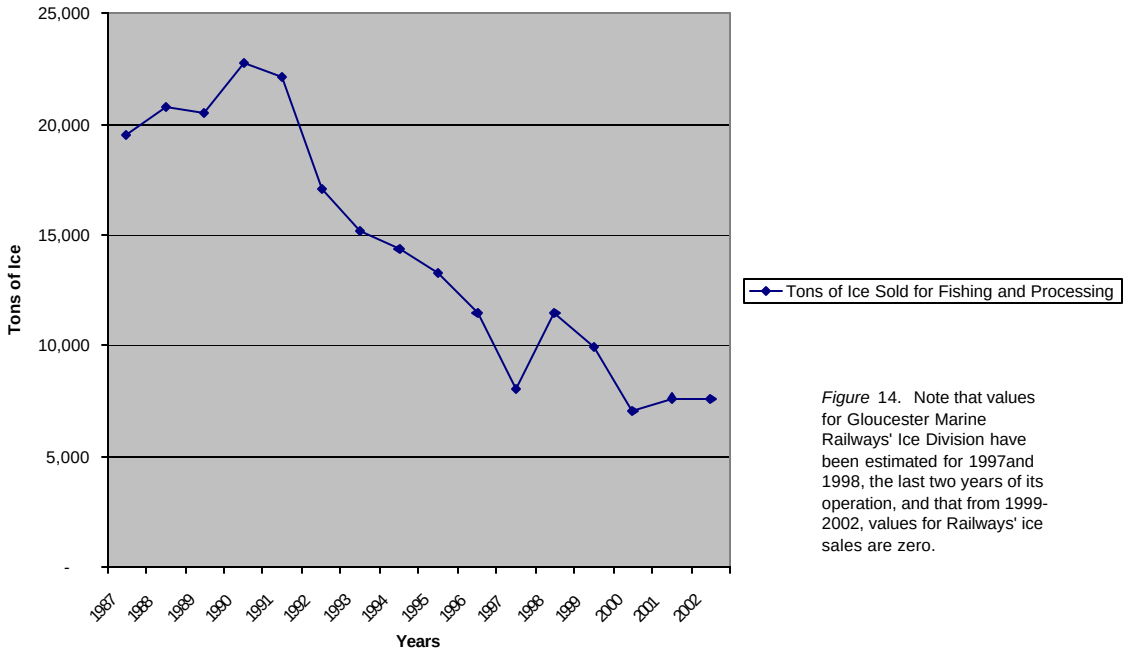


*Figure* 14. Note that values for Gloucester Marine Railways' Ice Division have been estimated for 1997and 1998, the last two years of its operation, and that from 1999-2002, values for Railways' ice sales are zero.

**Cape Pond Ice: Tons of Ice Sold to Vessels and Processors, 1984-2002**

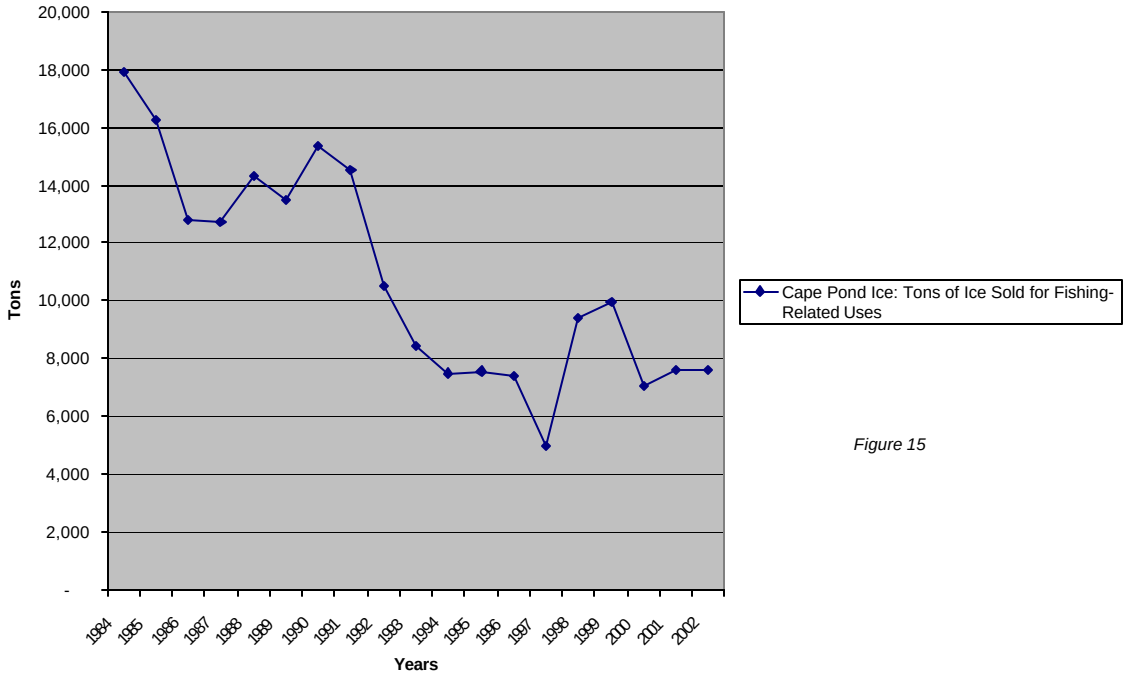


*Figure 15*

**Cape Pond Ice Company: Percent of Business Related to Fish, 1984-2002**

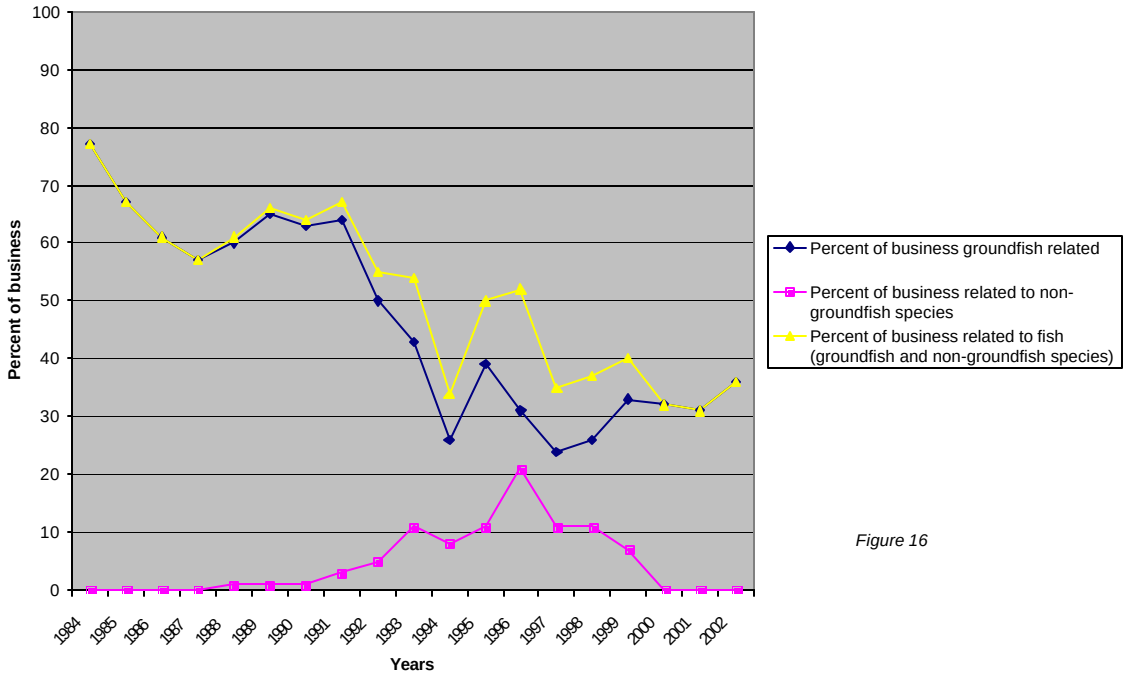


*Figure 16*